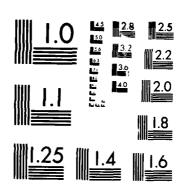
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THE ROLE OF VETERINARY MEDICAL CIVIC ACTION IN THE LOW INTENSITY CONFLICT ENVIRONMENT

A thesis presented to the Faculty of the U.S. Arm Command and General Staff College in partial fulfillment of the requirements for the degree

SEP 0 6 1988

MASTER OF MILITARY ART AND SCIENCE

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DANNY R. RAGLAND, MAJ, USA
B.S., Southern Arkansas University, 1972
D.V.M., Tuskegee University, 1980

Fort Leavenworth, Kansas 1988

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This study examines the use of veterinary medical civic action as a means to achieve internal defense and development objectives in the low-intensity conflict environment. It considers veterinary programs as an alternative available to Third World countries in areas where agriculture and livestock production are major social and economic considerations.

A comparative analysis of veterinary civic action projects in Vietnam and more recently in Latin America is conducted. Lessons learned are compared to determine the effectiveness of veterinary programs from animal health and human health improvement standpoints, as well as from a host nation stability standpoint. Additionally, a survey of veterinary professionals provides contemporary views on the employment of U.S. Army veterinary assets in Foreign Internal Defense programs.

Among the many conclusions that can be drawn from this investiation are: many of the mistakes made in Vietnam are being made today in Latin America, such as assignment of U.S. military personnel without training in civil affairs concepts, language, or host nation orientation; emphasis on training host nation personnel is secondary to training of U.S. personnel; projects are isolated, short-term in nature, and are not integrated into an internal development strategy involving the host nation government as the primary actor.

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A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE



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MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE ROLE OF VETERINARY MEDICAL CIVIC ACTION IN THE LOW INTENSITY CONFLICT ENVIRONMENT, by Major Danny R. Ragland, USA, 122 pages.

This study examines the use of veterinary medical civic action as a means to achieve internal defense and development objectives in the low-intensity conflict environment. It considers veterinary programs as an alternative available to Third World countries in areas where agriculture and livestock production are major social and economic considerations.

A comparative analysis of veterinary civic action projects in Vietnam and more recently in Latin America is conducted. Lessons learned are compared to determine the effectiveness of veterinary programs from animal health and human health improvement standpoints, as well as from a host nation stability standpoint. Additionally, a survey of veterinary professionals provides contemporary views on the employment of U.S. Army veterinary assets in Foreign Internal Defense programs.

Among the many conclusions that can be drawn from this investigation are: many of the mistakes made in Vietnam are being made today in Latin America, such as assignment of U.S. military personnel without training in civil affairs concepts, language, or host nation orientation; emphasis on training host nation personnel is secondary to training of U.S. personnel; projects are isolated, short-term in nature, and are not integrated into an internal development strategy involving the host nation government as the primary actor.

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CHAPTER 1

INTRODUCTION

General

Our allies in the Third World are being increasingly threatened by Marxist insurgents whose primary aims are to overthrow existing governments and install communist puppetstates. Once in power they become implacable foes of the United States and assist the Soviets in exporting subversion and revolution to neighboring states.

Because we know the people of the Third World hold the key to the success or failure of Marxist insurgency, it may be necessary for the insurgent-ridden government to use its military in a number of traditionally non-military roles.

The use of military assets in non-military roles is called military civic action. It involves the use of military forces to perform civic and social welfare missions in addition to their conventional military operations.

Military civic action is designed to increase public confidence in the government and undermine support for insurgent forces.

One element of military civic action is the use of veterinary medicine. Veterinary civic action conducted by military forces may be valuable as a means of regaining or maintaining the confidence of the population in areas where agriculture and livestock production are of great socioeconomic importance.

This study was designed to describe and evaluate the role of veterinary involvement in our Foreign Internal Defense effort. An in-depth review of past veterinary civic action programs, both military and civilian, was conducted to improve our future involvement in supporting low-intensity conflict.

DEFINITIONS

CIVIL AFFAIRS - Those phases of the activities of a commander which embrace the relationship between the military forces and civil authorities and people in a friendly country or area or occupied country or area when military forces are present.

COUNTERINSURGENCY - Those military, paramilitary, political, economic, psychological, and civil actions taken to defeat an insurgency.

COUNTRY TEAM - A group or committee of the heads or representatives of US government agencies operating in the host country. A typical country team consists of the ambassador and key members of his staff, and representatives of the United States Information Service, the Agency for International Development, and the Military Assistance Program.

FOREIGN INTERNAL DEFENSE - Participation by civilian and military agencies of a government in any of the action programs taken by another government to free and protect its society from subversion, lawlessness and insurgency.

<u>HOST NATION</u> - A nation in which representatives or organizations of another state are present because of government invitation.

<u>INDIGENOUS DISEASE</u> - Disease which is natural to the country where found.

INSURGENCY - An organized movement aimed at the overthrow of a constituted government through use of subversion and armed conflict.

INTERNAL DEFENSE AND INTERNAL DEVELOPMENT (IDAD) - Those measures taken by a government to free its society from subversion, lawlessness, and insurgency, and to promote its growth by building viable institutions (political, military, economic, and social) that respond to the people's needs.

LOW-INTENSITY CONFLICT (LIC) - A limited political-military struggle to achieve political, military, social, economic, and psychological objectives. It is often protracted and ranges from diplomatic, economic, and psychosocial pressures through terrorism to insurgent war. Low-intensity conflict is generally characterized by constraints on the geographic area, weaponry, tactics, and level of violence.

MEDICAL READINESS TRAINING EXERCISE (MEDRETE) - OCONUS training exercises to enhance the ability of US Forces to deliver health service support under austere conditions.

MEDRETES do not aim specifically at assisting or training host nation medical personnel. Any benefit that may accrue to host nation military or civilian populace is considered as "incidental" to the training of the US medical personnel involved.

MILITARY CIVIC ACTION - The use of preponderantly indigenous military forces on projects useful to the local population at all levels in such fields as education, training, public works, agriculture, and health and sanitation, which contributes to the economic and social development of the nation.

SUBVERSION - Those actions taken by an external power to recruit and assist indigenous political and military forces to overthrow their government through a coup d'etat.

VETERINARY MEDICAL CIVIC ACTION - Those portions of medical civic action attributable to the veterinary profession; for example, increased or improved production of animal food products, insect/rodent vector control, public health and sanitation, and food sanitation.

VETERINARY PUBLIC HEALTH (VETERINARY PREVENTIVE MEDICINE) - Veterinary medical programs which contribute to the health and well-being of the human population.

<u>VETERINARY TEAM</u> - A team of persons who possess a level of training which allows them to carry out veterinary medical projects; their associated medical supplies; and the equipment necessary to perform specifically tailored tasks.

<u>ZOONOTIC DISEASE</u> - Any disease that is transmissible from animals to man.

SIGNIFICANCE AND PURPOSE OF THE STUDY

There are several reasons why such a study is necessary. Since World War II, the preferred level of war

has been driven to much lower levels. Low-intensity warfare, be it terrorism, insurgency, or subversion, represents a cost-effective means of aggression for advancing the interests of our adversaries, while minimizing the prospect of a forceful response by the U.S. or our allies. As supporters of conventional military warfighting have kept the "East-West" confrontation in focus, there appears to be a resurgence of interest in application of civil affairs doctrine to counter low-intensity conflict. That new emphasis may be due to post-Vietnam unwillingness to commit conventional forces to battle, or it may be a realization that the contribution of the civil affairs concept(1) is logical in the LIC environment. Any study that promises to broaden the application of civil affairs is a worthwhile venture.

Secondly, it is difficult to find meaningful postoperational evaluations of military civic action performed in
Vietnam, or after. Attitudinal surveys or other analyses to
determine the socio-econoic effects of military civic action
in Vietnam were not conducted; therefore, a significant body
of knowledge and expertise has been lost. As a result, many
lessons learned during Vietnam are having to be re-learned as
we have begun similar operations in Latin America. There is
a need to compile and evaluate the veterinary civic action
experience in Vietnam.

Additionally, the U.S. Army Veterinary Corps has expanded its mission in recent years. It is now the single Department of Defense agent for provision of veterinary

services. The mission was added with only a modest increase in personnel. Because of the limited resources available, the Veterinary Corps leadership is obligated to carefully weigh the potential benefits of new personnel requirements against what must be given up. Therefore, some questions should be asked with regard to veterinary civic action.

Could the personnel, money, and equipment used to conduct civic action be more efficiently applied to other military programs? Is a veterinary team performing animal health programs in a foreign country more effective than an engineer team drilling a well? Does this type of program support the overall mission of the Army and the Veterinary Corps? This thesis provided a basis for answering those and other questions.

It is important to periodically assess operational reports and lessons learned. The mistakes and innovations from past experience can be applied to improve delivery of medical care. Tables of Operations and Equipment for military units must constantly be updated in response to changing missions, technology, and medical knowledge. Therefore, operational evaluation of veterinary projects enables us to consider the feasibility of using U.S. Army veterinary personnel as we also consider the future role of the veterinary Corps in the active Army.

This study provided an overview of problems associated with veterinary civic action in the low-intensity conflict environment. It presented the significant problems

encountered and decisions made, of achievements and mistakes, and lessons learned in Vietnam as well as those associated with veterinary programs being conducted today in Latin America. It provided a basis for those who must evaluate our current doctrine and organization, and for those who will be responsible for planning veterinary medical support in the LIC arena in the future.

RESEARCH METHODOLOGY

The methodology used to answer the primary thesis question "Is veterinary medicine effective as a form of military civic action in counter insurgency operations?" is outlined below.

Chapter 2 is an attempt to describe the environment in which veterinary personnel most likely will operate in support of host nation military forces. It defines insurgency, discusses its characteristics and goals, and outlines the prominent insurgency theories. This chapter provides some insight into why insurgencies seem to occur in the same areas of the world. It develops a basis for understanding the social, economic and political situation the civil affairs operator will find at the village level.

Chapter 3 defines counterinsurgency and discusses some of the alternatives available to a government during its attempt to rid itself of an insurgency. It emphasizes the importance of the people in the success or failure of counterinsurgency. The country team concept is introduced,

and its role in U.S. involvement in support of counterinsurgency is outlined.

Chapter 4 discusses veterinary civic action and its application. It also provides a brief history of the Veterinary Corps involvement in civil affairs operations.

Chapter 5 is a three-part chapter. Part one is a detailed analysis of veterinary civic action in Vietnam. Part two describes and analyzes veterinary programs which have been conducted in Latin America since 1983. Part three reports the findings of an opinion survey of animal health professionals who have been involved in animal health programs in low-intensity conflict areas.

Chapter 5 followes the U.S. Army Command and General Staff College battle analysis methodology(2), which is a technique for reviewing historical military records and deriving lessons learned for future use. The format starts with a descriptive explanation of the subject, followed by an analysis of the significant aspects of the action taken. The central theme of the battle analysis methodology is that every military operation conducted in the past has at least one point which is relevant to present and future military operations.

Chapter 6 draws conclusions and makes recommendations about future employment of the U.S. Army veterinary personnel in military civic action projects in counterinsurgency operations.

The capacity of our armed forces to conduct veterinary civic action should be considered as another weapon within the military arsenal. As such, we are obligated to cautiously weigh the benefits against the consequences of its employment as a force multiplier in foreign internal defense activities. Whereas, other studies on veterinary support in the LIC environment have looked at the total spectrum of veterinary services, (3,4) this study looks in detail at a single application of veterinary medicine in countering the growing threat of Marxist-Leninist-inspired insurgency.

ENDNOTES

- 1. In this instance the civil affairs concept refers to gaining the support of the civilian population as the key to defeating an insurgency. The concept is dealt with in detail in Chapter 3.
- 2. U.S. Army Command and General Staff College. P651, Battle Analysis. (July 1987): 5.
- 3. Samuel K. Kirk. "The Role of the US Army Veterinary Corps Officer In Stability Operations". U.S. Army War College Research Essay. (25 September 1970).
- 4. Carl T. Kyzar. <u>Veterinary Support I: The Low Intensity Conflict</u>. (August 1987).

CHAPTER 2

THE NATURE OF THE ENVIRONMENT

The Insurgency Environment

buring the past 40 years the Communist-bloc nations have tempered their early goal of a world dominated by monolithic communism. Setbacks in Egypt, Mali, Ghana, and Algeria, prompted the Soviets to develop a more patient and flexible approach to their quest for world-wide socialism. Their tactics have changed from open defiance to covert, subversive opportunism and encouragement of Third World insurgencies. Since there is a vast literature on the nature of insurgency, we will simply review here some of the pertinent elements of the environment to set the stage for an analysis of veterinary civic action.(1)

Insurgency is a struggle through subversion and armed conflict between an organized non-ruling group of people and a constituted government.(2) The motivations of the organized group can be many and in varying degrees, but, with few exceptions, their goal is to incite the population into forcibly overthrowing the government.

There are instances in which the insurgent group wants only to add legitimacy to an element of the political structure which they consider illegitimate. For example, some groups may grant legitimacy to the regime, but may reject certain people who are in power. Also, non-ruling groups may use violence to change policies they believe to be

repressive.(3) Nevertheless, most insurgencies will seek total capitulation of the existing government.

No two insurgency movements are exactly alike, but they all share some common characteristics. They are primarily a political conflict by an unconventional military means. The insurgency originates from basic social grievances, and cannot be successful unless based on the particular characteristics of a given society. As an example, the structure and tensions of the Malayan society provided an ideal base upon which to build a revolutionary movement. The Malayan Communist Party expressed its grievances through the political arm of the movement, but when the government did not address them, the stage was set for the emergence of political violence, and the insurgency.(4)

Every insurgency must have a central leadership, a hardcore group who believe in the goals and the philosophy of the organization. The mere existence of a vulnerable population will not initiate an insurgent movement. The vast majority of the people in an insurgent-ripe environment are politically passive. Democratic or communist ideology is not as important to them as the basic necessities—food, clothing, and shelter. They spend the majority of their time surviving, and have little time to worry about political institutions. Therefore, leadership and direction are required to convince people that their problems are the government's fault. The insurgent leadership uses a set of

ideas that proposes solutions to the problems, promises a better future, and justifies violence.(5)

This leads to the characteristic of popular appeal or common theme of grievance, and the support of the populace. The insurgent army needs a friendly and supportive (at least passive) population base to develop an infrastructure for intelligence, logistics and manpower support. Truong Chinh, a Vietnamese insurgent leader wrote, "the people are the water and our army the fish. Without them we cannot survive."(6)

Insurgency in any form is likely to take a long while to have significant impact--considering that most insurgent strategies depend on guerrilla warfare. Insurgencies are of necessity a lengthy process because of the initial weakness of the insurgents compared with government forces.

The characteristic of protracted war is important in that it means the insurgents never accept defeat as final. They behave on the assumption that they have initiated a historical process rather than an event or series of events. They expect setbacks in the course of the process, and they concentrate on learning from them and doing better next time. The Chinese communist revolution totalled twenty-two years. The Vietnamese communists fought the French, the South Vietnamese, and the Americans for thirty years before their revolution realized its goals. Twelve years were required to control the insurgency in Malaya, even though the British enjoyed many inherent advantages. (7)

Finally, an insurgent movement must have organization to carry out its goals. Most insurgencies have a political and a military section, each with different functions keyed on accomplishing a common goal. The military arm is subordinate, its purpose being to support political goals. Mao Tse-tung wrote, "Our principle is that the Party controls the gun and the gun must never be allowed to command the Party."(8)

Regardless of the strategy used to accomplish the eventual domination of a country, most insurgent groups have the same intermediate objectives: first, to limit the government's ability to provide services and to enhance the insurgent ability to provide for the people's needs; second, to undermine international legitimacy and support of the government, and to enhance international support for the insurgency; and third, to obtain the support of the critical segments of the population, such as the military or labor unions.(9)

The personality of an insurgency is the product of the group's operational environment and the philosophy of its leaders. The operational environment consists of the cultural makeup of the target population; the political, geographic and economic characteristics of the area of operations; the initial strength and popularity of the insurgents; the role of outside parties; and government strengths and weaknesses. These factors may be more important than the ideology and training of the group's

leaders in determining the strategy of a particular insurgency.

Four major strategies are considered as models for modern insurgency: Leninist, Maoist, Cuban (FOCO)(10), and Urban. In reality, most insurgencies will employ a local flavor, based on the operational environment and leadership philosophy, so that a single method may not be readily apparent.

LENINIST STRATEGY:

The Leninist concept is that a small, well-disciplined, well-organized conspirational group can obtain the support of critical groups within a society--groups such as labor unions or security forces, that are considered to be essential for continued government legitimacy. Leninist theory is based on a weak government which will collapse in the face of a well-organized insurgency. It assumes that the masses are alienated from the government, and that most insurgent activity occurs in urban centers where most of the political and economic power exists. The most recent example of the use of Leninist strategy is the Sandinista revolution in Nicaragua.

MAOIST STRATEGY:

The Maoist strategy, a heritage of the Leninist version of Marxism, was developed for revolution in Asian rural societies. In attempting to follow Lenin, Mao looked for a proletariat upon which to build his revolution. Only the individual people of China existed as a major force from

which to draw power. Mao theorized that, in those countries which remain largely rural and agricultural, the people of the countryside can successfully organize and move to encircle and eventally take over the cities.

There is an extensive organizational network made up of military and political branches which operates at the village level to disseminate propaganda aimed at discrediting the government and mobilizing support for the revolution.

The principle of political ideology training may be the key contribution of the Maoist strategy to insurgent warfare. It taught that revolution is a "war of ideas" before it is a war of movement. The people must be politicized, and believe they are a part of an era and not of mere events. The Vietnamese termed it "dau tranh", literally "people's struggle".

The Mao strategy, closely paralleled by the Vietnamese communist revolution, does not base its military structure purely on military principles. Military training always seeks to give a political orientation to military activity. Indeed, military officers are selected more on their political skills than on military skills. The product is a soldier who is politically motivated and tied to his party through some very deep-seated ideological values.(11) People in the West have difficulty understanding this concept. Most of that difficulty lies in the fear of what some refer to as the Military-Industrial Complex in which the military leaders are also political leaders.

Maoist revolution develops in three progressive phases, which can be attributed to other insurgent strategies as well. The evolution of any phase is not time dependent and may move back and forth from a more advanced stage to a lesser one, in response to success or failure of operations. An insurgency may take decades to start, mature, and finally succeed.

The first phase (latent or incipient) is the stage of agitation and propaganda among the peasantry. The purpose is for armed agitators to use propaganda and isolated subversive incidents to recruit supporters to form the beginnings of a political organization and of a guerrilla unit.

The second phase begins with an outbreak of overt violence--true guerrilla operations. This occurs only-when the subversive movement has gained sufficient local or external support to raise the level of violence.

The final phase is the climactic offensive by large, regular military units in direct confrontation with government forces. It is usually the culmination of many years of struggle to gain support, and of dogmatic adherence to the principles of a given strategy.(12)

CUBAN STRATEGY:

The FOCO concept is that a small group of armed men can incite a mass rebellion, given a weak government and favorable environmental conditions. The time required is much shorter than other strategies because there is no

requirement for a large complex organization. The Castro-led Cuban revolution is a primary example.

URBAN STRATEGY:

The urban strategy of revolution relies on the use of terrorism in highly vulnerable urban environments to transform political violence into a military situation. The urban environment of many Third World countries contains the potential elements necessary to incite violence—a large, disenchanted population in a built—up area where security forces are hampered in their efforts to maintain control. The actions of the Irish Republican Army follow urban strategy.(13)

Based on a number of failed attempts, primarily in Latin America, the FOCO and Urban strategies of insurgent warfare have lost much of their credibility.

The description of an insurgency as a violent movement with political aims is not a full characterization, as this is only the tip of the iceberg. There are underlying factors within a society which, given the right combination, will form a favorable environment for expression of political violence. Rarely will a single factor be responsible for insurgency. The elements which contribute toward raising the threshold of disenchantment and disillusion of a people who see the government as unresponsive to their needs, will vary in each case.

The contributing elements can be placed in three basic categories; those related to economic deprivation,

political isolation, and social deprivation. The lack of investment capital in a country, the control of capital assets by foreign nations, or a small or non-existent industrial base, will stymic economic growth and distribution of wealth.

Complex social problems such as rapidly expanding populations, drastically low educational and health care levels, inadequate technical skills and technological know-how; combined with political isolation or political instability within an inefficient, sometimes corrupt, government need only to be exploited to develop into an insurgency. People who live at subsistence level want first things to be put first. They are not particularly interested in freedom of religion, freedom of the press, free enterprise as we see it, or open elections. Their needs are more basic such as land, tools, fertilizers, something better than rags for their children, houses to replace their shacks, medical attention, primary schools, and freedom from police oppression.(14)

A potential revolutionary situation exists in any country where the government consistently fails to insure at least a minimally decent standard of living for the great majority of its citizens. In a modern world of mass communications, the "have-nots" are better able to compare their lot with the "haves". Consequently, people develop perceptions (sometimes with the help of political agitators) that their government is ineffective and non-responsive.

Whether true is of no consequence; the perception is all that matters.(15)

Revolutions against indigenous governments and organized resistance to foreign invaders have been common in every era of history. Each one had its own goals, based on the grievances of the leadership. But, today the face of revolutionary threat has changed. If group "x" has a grievance, which it wants to redress, eventually Marxist-Leninist ideologues will infiltrate the leadership and move the disaffected elements of society to armed struggle. The ultimate goal of the ideologues is a classless world society, the establishment of which is an announced goal of world communism. In November 1960 at the Conference of Communist and Workers' Parties held in Moscow, Nikita Krushchev voiced what has become the policy of international Communism. He stated that wars of national liberation are inevitable and that communists must fully support them.(16)

Mao's theory maintains that communist revolution has two stages: first, a national revolution and then, a social revolution. He concludes that Socialist countries should support nationalistic revolutions and that these revolutions should be led by a revolutionary party armed with Marxist-Leninism.(17)

Mao's followers have elaborated on his theories to the extent that they feel, in the final analysis, the creation of a worldwide classless society hinges on the success of revolution in Asia, Africa, and Latin America, since they have the overwhelming majority of the Third World's disenfranchised populations. In the last 40 years, 90% of the world's revolutions have occurred among these societies.

Factors Contributing to the Environment

We have discussed the root causes of insurgency, but not the causes of the underdevelopment and the hopeless socio-economic situations that exist in the Third World. To do this, we must understand that political unrest is caused by economic unrest, which is caused in turn by a number of environmental, cultural, and man-made factors. Superficial attempts to correct these factors plunges denied segments of society into a never-ending cycle of despair and hopelessness which worsens with each succeeding political administration that ignores its plight.

Let us compare the geographic characteristics of the United States with those of Latin America, Africa, and parts of Asia in order to understand in part why governments historically have had problems in meeting their needs. The geographic shape of the U.S. is compact and regular, making interior lines of communication much easier to develop. South America and Africa, and parts of Asia are geographically elongated, making communication much more costly and difficult. The temperate climate of the U.S. allows for growth of bountiful varieties of major food crops to provide balanced nutrition to its people. Rainfall generally occurs throughout the year, allowing for efficient

use of soil. Eighty percent of Latin America, Africa, and Asia are in the tropical zone, giving a false impression that agricultural products abound. In reality, only a narrow spectrum of foods can be grown. Major cereal crops are not well-suited to tropical environments, and yields are not spectacular. Rainfall in the tropics is seasonal, and tends to be excessive or non-existent.

The U.S. contains 23% of the Earth's arable soil. It is centrally located in the vicinity of major navigable rivers that allow easy export of products to market.

Conversely, the vast green expanses of tropical forests have lead people to believe there is great mineral riches in the jungle soils. In reality, this could not be further from the truth. Most of the jungle nutrients are captured in the canopy above the soil in a very complex floral ecosystem. When jungle is clear-cut it is difficult to get more than marginal production. Also, the mountainous topography of many tropical areas readily erode with destruction of the habitat. As populations increase, people are forced into marginal areas, putting more pressure on limited soils.

The topography of the U.S. facilitated westward spread of early settlers. As they moved westward, there were vast stretches of available land which would support development. As a contrasting example, Latin America is characterized by one continuous chain of high mountains 100-300 miles wide, with many peaks over 20,000 feet. South America is bounded by these mountains on the west and the

Amazon jungle on the east. Infrastructure development such as railroad, pipeline and road construction, as well as movement of supplies, is extremely expensive through such barriers. The Sahara dessert virtually sealed the continent of Africa from any meaningful European influence for centuries. The U.S. has many deep water harbors on the east and west coasts. Its mature rivers allowed development of hydroelectric power; whereas, the rivers and harbors of South America are generally shallow, discouraging development.

In addition to geographic limitations, the Third World countries are characterized by tribal, racial, linguistic, and religious differences that can be traced back to the beginning of recorded history. Historical city-state feuds, tribal disputes, and religious confrontations are typically centuries old. Most colonizing powers failed to develop native administrations or industries, instead choosing to extract raw materials for the benefit of the industrialized power. When the Europeans left, huge voids were created. Native governments now had to address the needs of their fragmented societies while having neither the human nor the material resources to meet those needs.

In response to these deficiencies Marxist ideologues have come with powerful ideas relating to classless societies in which there are no economic distinctions. Only through understanding the history of these "have nots", together with their contemporary political, social and economic problems, can we, in consonance with host country administrations,

begin to address both societal needs and the ideas which create revolutionary struggle.

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ENDNOTES

- 1. The endnote reference numbers 2, 3, 5, 6, 12, and 16 of the chapter text provide a representative collection of current information concerning the topic of insurgency. Voluminous material has been published on the subject.
- 2. U.S. Army. <u>FC 100-20, Low Intensity Conflict</u>. (16 July 1986): 3-1.
- 3. U.S. Army Command and General Staff College. <u>P552</u>
 <u>Insurgency and Counterinsurgency</u>. (January 1988): 82.
 - 4. Ibid.
- 5. Samuel B. Griffith. Mao Tse-tung On Guerrilla Warfare. (1961): 5.
- 6. Douglas S. Blaufarb. The Counterinsurgency Era. (1977): 3.
 - 7. Ibid.
 - 8. Ibid.
- 9. U.S. Army Command and General Staff College. <u>P552</u>, <u>Insurgency and Counterinsurgency</u>. (January 1988): 30.
- 10. The term "FOCO" is not an abbreviation, but is the terminology that has evolved to describe the Cuban strategy of guerrilla warfare. The "FOCO" designation refers to the revolutionary focus, or small group of dedicated guerrilla fighters who, according to the theory, will gain the confidence of the population, and eventually control the government.
- 11. Samuel B. Griffith. Mao Tse-tung On Guerrilla Warfare. (1961): 28.
- 12. Douglas Pike. PAVN: People's Army of Vietnam. (1986): 129.
- 13. U.S. Army Command and General Staff College. <u>P552</u>, <u>Insurgency and Counterinsurgency</u>. 29.
- 14. Samuel B. Griffith. <u>Mao Tse-tung On Guerrilla</u> <u>Warfare</u>. (1961): preface.
- 15. U.S. Army Command and General Staff College. <u>P552</u>, Insurgency and Counterinsurgency. 55.
- 16. U.S. Army. <u>DA-PAM 550-104, Human Factors</u> <u>Considerations of Undergrounds In Insurgencies</u>.
 - 17. Ibid.

CHAPTER 3

WINNING THE HEARTS AND MINDS

"The answer lies not in pouring more troops into the jungle, but in the hearts and minds of the people."

General Templer, Malaya, 1952

The Internal Defense and Development Strategy

The Internal Defense and Development (IDAD) strategy is founded on the concept that a nation must adopt a full range of measures to promote its growth and protect itself from subversion, lawlessness, and insurgency. The concept focuses on building viable institutions—political, economic, military, and social—that respond to the needs of the society. U.S. policy is to assist friendly governments in their efforts, when requested; but to be successful against an insurgency, the host country must implement a strategy specific to its unique situation.

This principle proved to be sound in Greece and the Philippines during the rash of communist-lead insurgent movements immediately following World War II. The British, as the host government in Malaya, used a well-planned and orchestrated program in their 1948-1960 operations against the Malayan Communist Party.(1)

Under the IDAD concept a government will develop a national strategy outlining long-term goals which address its problems. Short-term projects to maintain popular support

are necessary as part of the overall stability strategy.

However, there are very few "quick fixes" for the social,
economic, and political quagmire besetting developing
countries. The national strategy must seek to correct those
conditions that insurgents can exploit to gain popular
support.

There are four goals to successful IDAD programs:
balanced development, security, neutralization, and
mobilization.(2) Balanced development seeks to achieve
national goals through a mixture of social, political and
economic development. A mechanism must be developed for
individuals and groups to have grievances heard, arbitrated,
and resolved. All diverse groups within the society must be
included in the process of development. During the Malayan
Emergency, the initial British inattention to the Chinese
squatters in areas bordering the jungle conceded a segment of
the population to the insurgents from which they could draw
support. Considerable effort was required to reverse that
situation.(3)

Security includes all ac .vities to protect the populace from the insurgent and to provide a secure environment for development. A successful security program denies the insurgent his most valuable resource--popular support. Relocation of segments of the population, such as the British relocation of Chinese squatters, and the "strategic hamlets" program used by the U.S. and South Vietnam, were designed to protect the people from harassment

by insurgent forces, as well as to deny a base of support to the insurgents.(4)

Neutralization consists of all activities to disrupt, disorganize and defeat an insurgent organization. It is primarily the task of internal security forces. During the HUK insurrection, the Philippine government forces were faced with an unprecedented form of warfare. Through trial and error they arrived at a number of neutralization techniques which are still considered appropriate, such as the superior effectiveness of light infantry units, the use of specialized scout squads to reach into and strike enemy base areas, and the reliance on armed civilians under military supervision to defend their own homes. (5) Balanced development also contributes to neutralization by satisfying legitimate grievances that the insurgents attempt to exploit. Denying the insurgents legitimate issues discredits their propaganda and leadership.

Mobilization includes all activities to motivate and organize the populace in support of the government. The government must establish organizations which actively involve the people in the counterinsurgency effort. The social and military reforms adopted by Ramon Magsaysay during the Philippine insurrection, such as civic action projects and self-defense programs, involved the people and rallied them behind their government's counterinsurgency efforts.(6)

The achieving of security, mobilization, neutralization, and balanced development, if implemented and

administered properly, will isolate the insurgent force from the population, both physically and psychologically. They will undermine the rallying cry of the insurgent leadership, and thereby, destroy his basis for existence.

Military Civic Action

Military programs provide an atmosphere of security within which internal development can take place. However, in addition to its traditional security roles, the military may be beneficial in the non-traditional role of peacemaker, through active support of positive economic, social, and political actions to improve the lot of the populace.(7) The Draper Committee of 1958, while studying military assistance, considered the role of the military in nationbuilding. As a result of the study, the committe recommended consideration be given to using indigenous military forces in the socioeconomic development of their countries.(8)

This concept is referred to as military civic action, and it was developed as a part of stability operations; the original definition has not changed. It is the use of preponderantly indigenous forces on projects useful to the local population in such fields as education, training, public works, agriculture, transportation, communicatins, health, sanitation, and others contributing to economic and social development which also serve to improve the standing of the military forces with the population. U.S. military forces may at times advise or engage in military civic action in overseas areas.

The U.S. was not the first country to adopt military civic action. In his campaign against the HUKs (1949-55), Magsaysay conducted a "program of attraction" in which each of his soldiers had two duties: first, to act as an ambassador of good will from the government to the people; second to kill or capture HUK. This marked the first use of civic action by a modern army in combat against insurgents. It proved to be extremely successful in gaining popular support for government operations.(9)

In Algeria the French carried on a major pacification program. The Army had over 1000 special service units in the rural areas. The officers established residence and headquarters in the midst of the Arab settlements and prepared to administer to the needs of the people. The main effort centered on improving living conditions. French Army volunteers organized and taught school classes, helped build houses, sanitary facilities, and water supplies, and demonstrated improved agricultural and health practices. This program won the support of the populace in many areas.(10)

Advantages of Military Civic Action

The use of military forces to conduct civic action offers several advantages. For very remote and inaccessible areas, the military forces of a country are often the only government agency equipped and prepared to initiate needed programs. In developing nations the military is generally more modern and more technically advanced than its

counterpart civilian agencies. Military civic action promotes the desire of communities to contribute to their own progress. The people are encouraged to bring about their own social and economic improvement by working side by side with the military on projects the local civilian leaders have selected.

Civic action engages the military in peaceful and productive pursuits and refutes the arguments of those who condemn military expenditures as a useless drain of public funds. Thus it strengthens the ties of mutual respect and friendship between the civilian population and the national armed forces who represent the government. Civic action also assists in reducing discontent among the people, thereby discouraging insurgency and infiltration of extremist ideologies. It eliminates some of the grievances and helps to dissuade civilians from cooperating with insurgent forces.(11)

There is virtually a limitless variety of projects in which military forces may assist. Each military unit, regardless of its design, possesses capabilities to conduct civic action. The key to assistance projects is the needs of the locality. In planning civic action, projects should be tailored to each situation. Project selection must reflect as closely as possible the choice of the local people.

Selection of civic action projects requires detailed planning and rational consideration of the issues involved.

An evaluation should be conducted to answer several

questions. Does the proposed action conform to national policy and community desires? What will be required to accomplish the job? What resources are available, both civil and military, to accomplish the job? Can the project be maintained when military support is withdrawn?

Other considerations relate to the thrust of the programs. Should they be conducted to gain popular support, or to prevent cooperation with the insurgents? Another consideration is whether or not to provide civic action in insurgent-controlled areas. In Algeria, for example, the insurgents killed Arabs who took advantage of land reforms.(12) The actions should, as much as possible, be projects which can be accomplished with readily available assets, and should not be of such a technical nature that local people could not continue them after the operators have left.

Pitfalls of Military Civic Action

The potential pitfalls that lie in the path of civic action are many. Most are related to planning without local input. A major problem is that civic action may raise expectations of much broader support, only to cause frustration when that support does not materialize. Local workers in skilled labor, professionals, or local government officials may view civic action as a threat to their livelihood. Conversely, peasants may resist attempts by "upper class" officers or civilians to advise or train them.

action may be worse than no program at all. The fact that some of the people receive medical care, while others do not, may lead to more resentment when the government does not plan to return on a regular basis.

of an insurgency; however, the emphasis changes with each phase. Phase I activity should include promotion of social and economic development designed to assist in the removal of the cause of conflict and inhibit its growth. Emphasis can be placed on long-term projects, such as educational, or preventive medicine programs, to improve the lot of the people, as well as to enhance the government image.

During Phase II military civic action shifts to short-term projects that result in visible improvements. The purpose is to relate the armed forces to the people. The objective is to prevent escalation of the insurgency, to force it back into Phase I, or destroy it. Visible projects such as engineering projects and medical civic action are appropriate during Phase II.

In Phase III of an insurgency, the military may not be able to emphasize large-scale civic action programs, as it will be involved in a war of movement. The emphasis is in executing immediate measures, in cooperation with other IDAD programs to defeat or drive the insurgency back to lower levels of activity. Emergency medical care of injured civilians, or minimal refugee support may be the extent of military civic action in Phase III.(13)

Military Civic Action in Foreign Internal Defense

The U.S. may become involved in military civic action through its Foreign Internal Defense (FID) programs. The primary objective of civic action in FID is to assist host nation military forces in mobilizing and motivating citizens to support their government and military forces. This objective responds to broad U.S. political, ideological, humanitarian, economic, and security interests. U.S. military civic action programs are a part of our larger overall Military Assistance Program. The military assistance portion of the Foreign Assistance Act of 1961 authorizes the President to furnish military assistance to any friendly country, when such assistance will support stated U.S. interests.(14)

In most countries to whom the U.S. provides military assistance, a Military Assistance Advisory Group (MAAG) has been established to develop plans and programs under the ambassador's supervision, and to provide advisory services and technical assistance. The civil affairs officer on the MAAG staff is primarily responsible for working with the host country forces and other U.S. agencies in the planning, execution, and supervision of that portion of any military civic action program which is funded through the Military Assistance Program.

Department of the Army Circular No. 525, 20 Apr 1967, states that all U.S. military units will have the capacity to perform some civil affairs functions, particularly civic

action. Some units are particularly well-prepared. Civil affairs units may be tailored to specific civic action projects by adding or deleting functional groups that provide specific technical assistance. Special Forces units, by virtue of their specialty training and emphasis on low-intensity warfare, are particularly well-suited to conducting civic action. (15) U.S. Marines employed combined action units to assist in local defense and to conduct military civic action projects in Vietnam, and would do so today. The Air Force and Navy may provide medical assistance, air evacuation, and supply transportation capabilities.

The American soldier performing a civic action mission in a foreign country is confronted with the challenge of convincing unfamiliar people to accept his assistance and advice in undertaking projects which he hopes will be beneficial to them. This is an extremely demanding task. Superior techniques themselves will not insure the success of civic action. Success can be measured only by the endorsement and cooperation of the people he is assisting. This success cannot be accomplished without understanding the local customs and beliefs which influence the people's thoughts, values, and actions. Furthermore, American customs and beliefs will differ in many respects from those of the underdeveloped nations. Our attitudes must be adjusted to accommodate and blend in with the behavior of the local people.(16)

To provide effective support to civic action programs of host nations, it is important for our military leadership to understand civil affairs concepts and to provide the support necessary to implement those concepts. They must establish personnel management systems for developing specialists culturally and linguistically trained to specific countries. The civil affairs operator must possess a high degree of individual expertise in combatting insurgency, as well as individual technical proficiency. We cannot afford to send "just anybody", otherwise, we risk upsetting the delicate balance of local support which is so important to the long-term efforts of friendly governments.

This chapter has outlined counterinsurgency strategy and the foreign internal defense strategy of the United States. It has specifically introduced military civic action as an element of our security assistance programs. It emphasizes that our commitment to counterinsurgency elsewhere must be to supplement a host country national strategy that is long term in nature and is keyed on gaining the local support of the civilian populace.

Chapter 4 will address the use of veterinary medicine as one element of civic action in support in host country internal defense and development, and in U.S. Foreign Internal Defense.

ENDNOTES

- 1. U.S. Army. A Guide To Military Civic Action. (1969): 31.
- 2. U.S. Army. <u>FC 100-20, Low Intensity Conflict</u>. (16 July (1986): 5-5.
- 3. U.S. Army Command and General Staff College. <u>P552</u>, <u>Insurgency and Counterinsurgency</u>. (January 1988): 92.
- 4. Stanley Karnow. <u>Vietnam: A History</u>. (1983): Chapter 1.
- 5. Douglas Blaufarb. The Counterinsurgency Era. (1977): 28.
- 6. U.S. Army Command and General Staff College. <u>P552</u>, <u>Insurgency and Counterinsurgency</u>. (January 1988): 92.
- 7. Fredelino S. Bautista. "Toward A Theory of Military Involvement in National Development In Underdeveloped Countries." Masters of Military Art and Science Thesis, U.S. Army Command and General Staff College. (1985).
- 8. U.S. Army. <u>Military Civic Action As An Element of Internal Defense and Development (IDAD)</u>. (January 1973): 2.
- 9. Douglas Blaufarb. The Counterinsurgency Era. (1977): 30.
- 10. U.S. Army. <u>Department of the Army Pamphlet No. 550-104</u>, <u>Human Factors Considerations of Undergrounds in Insurgencies</u>. (September 1966): 270.
- 11. U.S. Army. A Guide To Military Civic Action. (1969): 4.
- 12. U.S. Army. <u>FC 100-20, Low Intensity Conflict</u>. (16 July 1986): 5-5.
- 13. U.S. Army. The Role of the Military in Internal Defense and Internal Development. (November 1976): 1-5.
- 14. U.S. Army. <u>Military Assistance Programs and Civic Action Agencies</u>. (August 1972): 1-5.
- 15. U.S. Army. <u>Vietnam Studies: U.S. Army Special Forces</u> 1961-1971. (1973).
- 16. John Zygiel. " A View of Civil Affairs In the LIC Arena," Military Review, 66. (August 1986): 58-64.

CHAPTER 4

THE ROLE OF VETERINARY MEDICINE, PAST AND PRESENT

The History of Veterinary Civic Action

Civic Action involvement by the U.S. Army Veterinary Service has its roots in the latter stages of World War II. During the War, the Veterinary Service expanded its role considerably from traditional animal medicine and food inspection. Army veterinarians performed laboratory services concerned with food and various types of research supporting the emerging veterinary public health mission. But, as our forces began to liberate wartorn areas and occupy surrendered countries, Veterinary Service personnel became involved in civil affairs and military government (CA/MG) operations.(1)

Civil affairs/ military government was developed without precedent and prewar planning. Because of our recognized responsibility for the health and prevention of disease among personnel subject to military control, the Army Medical Department was directed to provide for the public health of inhabitants of occupied territory.(2) The decision to use veterinary officers in CA/MG operations during World War II was made in the summer of 1943 by the Civil Affairs Division upon recommendation of The Surgeon General. His comments were appropriate:

Ever since the development of modern veterinary medicine, the veterinarian has been an important factor in the livestock economy through the preservation of animal health. A healthy livestock industry means increased animal work power; increased meat, milk, eggs, and other foods of animal origin; and increased nonfood products such as wool, leather, and pharmaceuticals. In more recent years, the veterinary profession has been increasingly active in public health functions such as food inspection and control of animal diseases transmissible to man. All of these functions are highly important to civil affairs/military government operations in combat and occupation.(3)

The Veterinary Service experiences of the World War II era were carried forward and used extensively, both in Korea and Vietnam. Unlike the original civil affairs/military government programs meant to restore and begin rehabilitation of the respective occupied countries' veterinary public health and agricultural livestock industries, Vietnam era civic action supported fledgling or weakened friendly governments through stability operations designed to strengthen the government and motivate the people to cooperate in counterinsurgency efforts.

Beginning in 1966, veterinarians were assigned to the 5th Special Forces Group in Vietnam. Special Forces conducted civic action as a supplement to their primary mission of advising South Vietnamese forces. Special Forces veterinarians provided medical support and advice to agricultural projects conducted by Department of Defense agencies as well as the Department of State. They also responded to requests for assistance in animal disease

outbreaks affecting villages within their operational areas.(4) Veterinary JA teams conducted civic action in all four Corps areas in addition to their primary missions of food inspection and animal medicine.(5) U.S. Air Force veterinary personnel provided civic action support as requested on a voluntary basis.

programs occurred in a variety of locations outside Vietnam.

Personnel from the 1st Special Forces Group in Okinawa and

3rd Civil Affairs Group in Panama supported a number of

projects in American FID efforts. Veterinarians from the 1st

SF Group primarily rotated in and out of Vietnam, while the

3rd Civil Affairs veterinary team participated in public

health surveys, disaster relief, and civic action support in

several Latin American countries.(6)

For a decade following the Vietnam experience, there was a de-emphasis in the use of civic action as part of a post-Vietnam "handwashing" of all aspects of insurgency and counterinsurgency. Douglas Blaufarb, in his book, The Counterinsurgency Era, pointed out that many analysts considered the post-World War II insurgency period, which ended around 1975, as a fluke of modern history, and that communist insurgency would not be a threat in the future.(7) As a result of that type of thinking, civil affairs units were de-activated and placed in the reserves, where 97% still remain. Although later analysis would prove otherwise, the

nationbuilding effort in Vietnam was not initially considered effective, and civic action dropped to the bottom of the priority list.

In the early 1980s, civic action again found favor in the insurgent-ripe environments of Central and South America. In July, 1983, the U.S. began a series of continuous combined military exercises with Honduras. The exercise medical element included a veterinary detachment which rotated regularly to provide veterinary support to the American Forces. A significant portion of their time was spent conducting civic action (known as Medical Readiness Training Exercises, or MEDRETE) in local Honduran villages.(8)

In April 1985, a Veterinary JA team was activated in Panama to support military exercises in the U.S. Army Southern Command area of operations. One of its primary missions was the planning and conduct of combined civic action programs in support of host country IDAD.(9) As part of their operations, Special Forces veterinarians conducted civic action action in Latin American countries.

Additionally, reserve and national guard veterinarians provided incidental civic action when assigned to support road-building projects in Panama, Honduras, and Ecuador.(10)

The Application of Veterinary Civic Action

In predominantly rural and agrarian Third World countries, host nation development that emphasizes improving

animal health and livestock production can be beneficial. In a remote village where mechanization is non-existent, a horse may be the only means of transportation. A cow and a few rigs may be the only source of protein or extra spending money available to a family. Livestock health and production programs designed and implemented by the government attack the social and economic problems at the very foundations of the society. When the people's livelihood revolves around subsistence agriculture, attempts to mobilize the citizens to support to the government must begin at subsistence level.

Animal health programs are beneficial for several reasons. In subsistence economies the health status of the local food animal population correlates directly with the health of the local human population. Therefore, improvement in meat production via improved animal health programs and animal husbandry practices will provide higher quality diets (mostly from increased protein intake) for the human population. This in turn enhances human health and the standard of living. Second, programs instituted to break the transmission of zoonotic diseases will subsequently improve human health by reducing the incidence of disease within the human population. Additionally, any program that successfully removes economically devastating diseases from the livestock population will improve livestock production and boost the local economy.(11)

To establish effective host country veterinary programs several factors must be thoroughly considered.

First, the civic action planners must have a good understanding of the host nation's development strategy. Hopefully, the strategy is aimed at destruction of a well-identified insurgent center of gravity. If the insurgents' focal point is an expanding population without economic growth, the center of gravity becomes the government's inability to provide basic needs (food, fuel, clothes, housing) and the hope of economic improvement to the individual. A strategy to enhance pork production through a nationwide hog cholera vaccination program might serve to eliminate the insurgent's grievance. The military could support this effort through a variety of means, including transportation for vaccination teams into isolated areas.

To support such an initiative effectively, the availability of resources must be addressed. The military forces of most developing countries have limited human and material resources, especially regarding veterinary medical capabilities. For example, in 1970, South Vietnam had seven graduate veterinarians. Only one was a full-time military officer; the others were reservists.(12) Today, the Panamanian Defense Force, a strong military with an active civic action program, has only one military veterinarian.(13) This situation seriously limits the expertise available for a variety of programs, but it also underscores the need for both civilian and military involvement in the stability program. In May, 1985, Blacklight IV, a joint/combined civic action effort was conducted in the

Republic of Panama. Military and civilian veterinary personnel representing the U.S. Army, the Panama Defense Force (PDF), the Panama Ministry of Health, and the Panama Ministry of Agriculture participated in the exercise. Some goals were accomplished collectively that would never have been possible through independent action. (14)

The Panama Ministry of Health is responsible for nationwide control of rabies. The Ministry of Agriculture is charged with surveillance and control of livestock brucellosis. Neither has sufficient personnel, medical resources, or transportation assets to provide services in remote areas where they are needed most. Military equipment and helicopters from both the U.S. Army and the PDF were used during Blacklight IV to transport veterinary teams from all four participating services to jungle villages where no roads existed.

The Ministry of Health had been using a rabies vaccine which conferred only one year of immunity in vaccinated animals. The U.S. Forces were able to provide a rabies vaccine that established three-year immunity, effectively establishing rabies-free villages and eliminating the need to return to the villages for a longer period.

A common problem facing the Ministry of Agriculture was spoilage of blood samples taken from cattle for laboratory testing. Military transportation insured all blood samples were received at the laboratory before spoilage occurred. The accomplishment of improved animal health also

left a positive mark in the minds of the local people toward the commitment of their government toward improved social and economic development.(14)

Relatively speaking, the U.S. Army Veterinary Service suffers the same personnel constraints as other countries. The number of veterinarians available to support host nation development is severely limited, making it necessary to work in concert with other federal agencies in the host nation, such as the State Department, Agency for International Development (AID), U.S. Department of Agriculture, and with their host nation counterparts. AID is officially responsible for helping foreign nations improve their health care systems (including veterinary medicine). The USDA, particularly in the western hemisphere, is often involved with developing veterinary programs. Both agencies are frequently not directly involved on site with executing programs, but instead contract with outside organizations for actual appplication. All U.S. agencies working in a developing country must coordinate their efforts to assure most efficient use of finite resources.

Civilian organizations may also serve as additional force multipliers. These organizations will many times share the same goals, but may be motivated by a different philosophy. One example is Heifer Project International (HPI), a well-established, nonprofit, interfaith agency which has operated since 1944 to improve the quality of life for

low-income rural people. Their livestock donation and selfhelp programs have provided dairy and beef cattle, goats,
sheep, pigs, rabbits, honeybees, poultry and draft animals to
people in 107 countries and 33 states in the U.S. In
addition to the animals, HPI provides education and
materials.

The animals are superior and adaptive to local conditions. As an example, the cool climate in some high altitude areas of Central America is well-suited to dairy cattle production, while high-producing dairy breeds perform poorly in the tropical heat only a few miles away.

Nevertheless, the replacement of native-bred Zebu cattle with Holstein, Guernsey, and Brown Swiss dairy breeds in the cooler regions has improved milk production considerably.

Essential training of HPI participants in livestock care and management ensures the health and productivity of these animals. Participants will share the offspring with others in their community, creating an expanding cycle of livestock products and prosperity.(15)

An off-shoot of Heifer Project is Volunteers In

Veterinary Assistance (VIVA). VIVA provides material

resources, technical information, and technical services to
animal health care personnel and farmers in developing areas.

(16) VIVA projects are generally similar to host nation
development programs. Volunteer agencies from countries
other than the U.S., and civilian organizations from within
the host nation may be additional sources of materials and

manpower. It is important to consider that neutral groups may carry a good deal of influence with the people; therefore, planning and conducting stability programs in conjunction with such organizations may improve the standing of the host nation government and military.

After resources are inventoried, a local survey of the project area must be conducted. Primary consideration should be given to the fact that projects either requested by, or at least agreed upon by local civilian leaders are typically more successful than those which were initiated without their participation. The planning survey should include human and animal disease incidence; climatic conditions; types of crops grown; agricultural production systems; agricultural economics—market systems, cooperatives, banking; infrastructures—roads, rivers, electrical power availability; and the quality of human and animal diets. Taking the above factors into consideration, specific projects can be developed.

Long-term programs that project a perception to the host nation population of a government commitment and not an action driven by outside (US) influence are more stabilizing and positive than short-term "quick-fix" solutions. This is primarily true because nationalistic views of the people in most countries reject the presence of outside powers as unnecessary attempts to interfere with their own domestic affairs.

However, short-term veterinary participation may be indicated as a rapid mobilizer of popular support during the escalation phase of the insurgency. Vaccination programs in which a single dose provides lasting immunity, or a vampire bat control program (17), are examples of effective short-term projects.

Long-term programs to improve animal health and increase production based on solid economics with a gradual phaseout of U.S. assistance is the optimum solution for neutralizing some of the environmental conditions on which subversives may focus. Such programs must be developed after extensive evaluation of each country's situation by regional experts. Programs requiring active participation by local financial institutions tend to be successful. They provide incentive and tangible rewards. A good example would be the requirement to feed mineralized salt and vaccinate cattle against hoof and mouth disease as a prerequisite to secure a livestock production loan from the local bank.(18)

In selecting projects, consideration must be given to the cost and availability of supplies and medications needed to continue the project when U.S. support is no longer available. Locally produced vaccines are usually much less expensive, and are more easily procured because import restrictions usually limit the variety of supplies and medications available. Additionally, a project has a better chance of survival if the people have been trained to carry on the project without dependence on outside help. The

construction of concrete dipping vats as a village level program to control external parasites on livestock is an inexpensive short-term project with long-term implications. The only cost in continuing the program is the cost of a dipping compound.

In planning animal health programs, it is essential that U.S. military veterinary personnel should function, whenever possible, as trainers in the Third World. Working together, U.S. and host nation veterinary personnel can develop a legacy of capabilities and expertise in the host country which will eventually meet the domestic requirements and popular expectations. As such, there must be a highly coordinated effort between military and civilian animal health agencies with a sizable representation of host nation veterinary medical authorities on each mission. The U.S. effort must neither undermine nor compete with the established health services of the host nation.

For nearly three decades the U.S. Army Veterinary Service has applied its unique capabilities toward improvement of animal and human health through programs involving civilian populations. The body of accumulated experience must be applied to learn the lessons of the past and to improve the delivery of veterinary civic action in the future. The following chapter will review the record of the Veterinary Service in Vietnam and, more recently in Latin America.

ENDNOTES

- 1. It is quite possible that credit for originating the term "civic action" belongs to Defense Minister Ramon Magsaysay of the Philippine Islands, who in 1950 led the Filipino Army against the Communist Hukbalahps. Another widely held belief is that Lieutenant Colonel Edward Lansdale, an American Advisor to Magsaysay authorized the new label. (It is generally agreed that Lansdale was the prototype for the socially conscious Colonel Hillondale in the book by William Lederer and Eugene Burdick, The Ugly American.) Lansdale defined ciric action as "...almost any action which makes the soldier a brother of the people, as well as their protector."
- 2. Everett B. Miller, <u>U.S. Army Veterinary Service in World War II</u>. (1961): 8.
 - 3. Ibid.
- 4. An oral interview with Dr. Strandberg, the first veterinarian to work with the 5th Special Forces Group on civic action projects in Vietnam. His comments concern the veterinarian's function during that period, and also a recollection of the other veterinarians who served with the 5th SF during that time period.
- 5. The term "JA" is the Army designation for the Veterinary Services TOE detachment, small. A JA team, consists of one Veterinary Medical Officer and five enlisted animal medical and food inspection specialists. JA teams are allocated on the basis of one per 20,000 soldiers supported. The JA team can be used to augment a JB team, the Veterinary Services Detachment, large.
- Oral Interview with COL McChesney, MACV and USARV Veterinarian 26 May 1972 29 March 1973. Col McChesney recounts the TOE team structure during his tour in Vietnam, as well as some comments on civic action.
- 6. Operational Report--Lessons Learned, Third Civil Affairs Group, Panama, (October 1969.)
- 7. Douglas S. Blaufarb, <u>The Counterinsurgency Era</u>. (1977): preface.
- 8. Philip A. Brown, "Honduras Housecalls," <u>Soldiers</u>, 40: 15 (September 1985): 18.
- 9. After Action Reports, 216th Medical Detachment (JA), Panama, (1 April 1985 to 16 November 1986).
- 10. Dennis Steele, "Long Hard Road," <u>Soldiers</u>, (January 1988): 25.

- 11. Information Paper, 216th Medical Detachment (JA), Panama, dated 20 December 1985.
- 12. Taken from the transcript of an oral interview with Colonel McChesney, U.S. Military Assistance Command Vietnam (MACV) Veterinarian and U.S. Army Vietnam Veterinarian, from 1971-1972.
- 13. After Action Report, 216th Medical Detachment (JA), Panama, (31 May 1985).
 - 14. Ibid.
- 15. Taken from transcript of a written interview of Dr. Robert Pelant, Heifer Project International Staff Veterinarian, dated 28 December 1987.
- 16. Robert Pelant, "Volunteers in Veterinary Assistance Conceived After Nicaraguan Project," <u>Journal of the American Veterinary Medical Association</u>, Vol. 191, No. 5, (September 1, 1987): 508-509.
- 17. G. Clay Mitchell and Richard J. Burns, Chemical Control of Vampire Bats; (May 1973).
- 18. Carl T. Kyzar, "Veterinary Support in the Low Intensity Conflict," A manuscript produced in August 1987.

CHAPTER 5

DESCRIPTION AND ANALYSIS

VETERINARY CIVIC ACTION IN VIETNAM

Introduction

From the beginning of American involvement in Vietnam, command emphasis was given to civic action projects in almost all units, regardless of type. Extensive projects such as those conducted by the 173d Airborne Brigade(1), consisted of classroom construction, well drilling, distribution of food and clothing, medical assistance, and an almost endless list of others. Special Forces units, from their inception in 1961, adopted civic action as an integral part of the counterinsurgency strategy. A state of mind favorable to psychological operations was created by generating a sense of goodwill in the population through a vast array of beneficial actions.(2)

Veterinary participation in such projects evolved in much the same way as in other units. In their various roles, veterinarians assigned to Vietnam became aware of the serious problems that existed regarding animal health and food animal production, and the inability of the host nation to deal with them.(3) Veterinary units were uniquely prepared to support this key area of stabilization operations. They initially participated in civic action unofficially and responded to requests for medical support in addition to their other duties.

Veterinary units were assigned as early as 30 March 1962, but there is no documentation of formal civic action programs involving veterinary assistance during the early advisory period of the Vietnam War. The initial veterinary mission was primarily to provide food inspection and preventive medicine services in support of U.S. and Allied Forces. As troop numbers increased, care of government-owned animals, zoonosis control, and medical laboratory support consumed increasing portions of veterinary support.

Veterinary personnel assigned to TOE Veterinary

Service units, Medical Laboratories, Transportation Terminal

Commands, and Special Forces units became involved in a

variety of separate civic action programs. Veterinarians

responded to requests from Army combat commanders and from

other services to assist in pacification programs.(4) For

instance, U.S. Navy personnel requested the services of U.S.

Army veterinarians to advise on animal husbandry and health

management to support their food supplement program. But, the

preponderance of veterinary support requests came from USAID,

which was heavily involved in a number of economic development

programs involving livestock production at the village and

hamlet levels.(5)

Special Forces Veterinarians

The first Special Forces veterinarian was assigned to 5th SFG on 28 January 1966. He and the next two were on six-month TDY orders from the 1st SFG, Okinawa.(6) Afterwards, veterinary officers were in-country transfers or assigned

directly from CONUS. Their work was primarily civic action, which involved travel in all four Corps areas in response to requests for assistance during animal disease outbreaks affecting area development centers, or at other locations within operational areas.

Special Forces funding was separate from other units operating in Vietnam, and their supply channels were different. Consequently, the priority of interest placed on civic action by the 5th Group, as well as the relative ease of project funding allowed SF veterinarians more freedom to emphasize civic action programs that reflected their specialty areas of interest, and even their individual personalities.(7) Conversely, within Army Medical Department (AMEDD) units civic action projects had to compete for time and resources with other essential missions, even though command policy dictated that everybody would support civic action to the degree that they could.(8)

Programs designed to improve livestock and poultry production were in existence for three or four years when the first veterinarians arrived at 5th SFG. Their most immediate task was to convince the American advisers, as well as the Vietnamese people, that good production practices and management were not enough; that measures taken to prevent disease in their animals would result in greater yields and more profits. Training courses were organized to teach indigenous animal husbandry, basic animal health concepts, and treatment techniques such as vaccination and wound care. At

least three of these courses were taught in three or four-week sessions at Tan Son Nhut Air Base. Attendees were Government of Vietnam (GVN) animal husbandry officials from remote areas.(9)

Another program was designed to improve local procurement of livestock for feeding indigenous troops. This included correction of at-purchase inspection procedures, and care and handling before, during, and after shipment to the using camps. Shipments were 95% by air including air drop. Losses were reduced by provision of shade, water, caretaker handling, closer coordination between placing onto the flight strip and flight times, caring for the animals when flights were aborted. The program also improved facilities and care for holding periods before shipping then the animals had already been stressed by surface shipment from their point of origin to the airfields.(10)

One SF veterinarian attracted considerable publicity by tranquilizing two elephants for airlift from the Special Forces camp at Trang Phouc to the Montagnard village of Tra Bong, where they were to be used to haul logs for the sawmill located there. Once tranquilized, each elephant was loaded into a separate C-130 airplane, flown to Chu Lai, then sling-transported via CH-53 helicopter for the remainder of the trip. Upon arrival at the sawmill, an antagonistic drug was given that revived the elephants.(11)

Two methods were used to handle animal disease control work. The first method involved a veterinarian visiting a

limited number of villages on a recurring basis, providing medical care to individually-owned animals. The latter, known as the Medical Civic Action Program, or MEDCAP, involved a one-time visit to a village, in which case long-term disease prevention measures were applied, such as vaccinations and deworming. The former method was considered to be the most effective, as it allowed for better professional care and follow-up. It also demonstrated American and Republic of Vietnam (RVN) commitment to the stability of Vietnam.(12)

Prior to May, 1966, when all the Veterinary Field Forces were placed under the command and operational control of the 4th Medical Detachment (VS) in Saigon, Veterinary Services being provided by AMEDD units were random and not under any central direction. The 68th Medical Detachment in Qui Nhon and the 75th at Da Nang were operating as best they could with no chain of command nor any specific organization through which they could make recommendations or provide reports of action.(13)

The Revolutionary Development Program, the collective name given to civic action projects, was the responsibility of the combat divisions. The programs were coordinated by MACV or USARV, and even if there was a Veterinary Detachment within a division, there was no provision for veterinary support for the Revolutionary Development Program. Any support that was given would be the result of some individual's initiative, and not as a result of a coordinated civic action plan.(14)

This problem, in addition to the continuous requests for support from USAID, prompted the formation of a veterinary civic action subcommittee in May 1969, primarily to coordinate and to provide a degree of planning into the use of available veterinary resources. This committee was patterned after existing subcommittees that coordinated dental, medical, and nursing involvement in civic action. The senior USARV veterinarian was the chairman; other members were the USAID veterinarian, the 7th Air Force veterinarian, and the MACV veterinarian. A formal system of reporting was developed, and reports were then sent through command channels to the Commanding General 44th Medical Brigade. Veterinary civic action activities were vastly improved by this action, even though it was a late development.(15)

Individual Projects

A number of specific projects will be presented that illustrate "real world" problems and considerations in delivering civic action in a LIC environment while attempting to adhere to civil affairs concepts.

Binh Duong Province, 1966-67

In Binh Duong province, the activities of the Vietnamese animal husbandry director were limited to the area immediately surrounding the province headquarters. He had only two field men to cover the entire province, which was one of the largest in Vietnam. Most areas were not secure enough for them to enter. The American veterinary officer assigned to the province worked in a village only six miles from the

Animal Husbandry Headquarters, but the village people had never received assistance from the government officials. The animal husbandry office had free access to vaccines from Saigon, but possessed scant stocks of antibiotics and other drugs. The director appeared to have some knowledge of livestock and animal diseases, but lacked motivation. He refused to leave his office to assist the American veterinary team, or indeed, to let them assist him. However, his field men often went with the Americans.

The goal of the U.S. Army veterinarian was to start an improvement program in the village and let the animal husbandry agency take over and continue it. The project was successful to a limited degree, for the villagers became acquainted with the Vietnamese animal husbandry workers, and on at least two occasions called on them to treat sick animals.(16)

In most Vietnamese villages, the only important animal product was pork. The people could not afford to raise beef, although they would butcher oxen or buffalo that died or were killed. To be of any benefit, the veterinary team had to work toward improving the health, and subsequently the production, of the local swine. They also had the added burden of winning the favor of the animal husbandry director, whose office was not far away from the village of Binh Chuan where the Americans worked.(17)

The village chief was quite helpful when a voice of authority was needed in dealing with the people. He did not

live in the village, for fear of his life; however, he revealed that each of the four hamlets had chiefs who also kept their identity secret to protect themselves from assassination. The villagers did not know whom among them was the chief. Creating any organized program in Binh Chuan seemed an impossible task.(18)

Treating animals proved to be an effective way of breaking the ice and attracting the interest of the people. Foot and Mouth Disease was devastating the draft oxen. Approximately one-fourth of the families had oxen. They were lame and off feed, with erosion of the dental pads.(19) The animals were treated with PenStrep and Gentian Violet solution was applied to their feet. Soon, most of the oxen in Binh Quoi hamlet had purple feet, and everybody knew the animal medical team had been there. This turned out to be a very good promotional aid.

The team conducted a survey of swine and found that seventy families had pigs, which they were trying to fatten for market. An eight-week-old weanling pig could be bought at the market for 2000 piastres, or about \$18.00. A pig was fed for about ten months on rice meal and banana stalk. A fattened pig, weighing about 100 kg sold for 12000 piastres. The net profit at the end of ten months was 4000 piastres, or about \$35.00. Several families in the hamlet lost pigs to hog cholera. When one considers that over half of these pigs died before they reached market size, the profits were lessened by one-half.(20)

The veterinary team devoted many hours to counseling individual families, by squatting on the ground and writing figures in the sand, and drawing diagrams of parasite life cycles. Perhaps the best selling point was to explain the impact of roundworm infestation on the health of the pigs, then treat the pigs with a dose of piperazine.(21) Often, people would come from great distances to report the passage of the live white worms.

After deworming had been completed for the second time, a GVN vaccination team was brought in to vaccinate against hog cholera. A special attempt was made to keep the vaccine refrigerated to demonstrate to the animal husbandry men, who had a reputation for abusing vaccine, the proper way to handle it.(22)

After the health of the animals was stabilized the team concentrated on properly constructing sanitary pig pens. An attempt was made to educate the hamlet people to the point that they would want a pig pen, and understand its purpose. The most industrious families were selected for this project, and they were assisted in building a pen suitable to their needs. The people did all the work, and provided all the material except the cement, which was furnished by USAID. Concurrently with the pig pen project, a garbage-feeding program was developed. About three-hundred gallons of edible garbage from a U.S. military facility in the vicinity was used each day.(23)

This program was monitored for two years, and was used as a standard from which other pacification programs were modeled. Similar projects were established in the other hamlets of Binh Chuan village.

Special Action Forces - Asia (SAFAsia) Veterinary Support to

U.S. Navy/Vietnam Navy Animal Food Supplement Program; October

1970 - November 1971

In January 1970, the Commander, Navy Forces Vietnam (COMNAVFORV) began an animal food supplement program for the Vietnamese Navy. The program was sponsored financially by the Helping Hand Foundation, a non-profit organization. The animal husbandry program, encompassing swine and poultry production projects at the Vietnamese Navy units, was only one part of the whole program. It was designed to provide a small amount of meat protein in the daily ration of each Vietnamese sailor and his dependents.(24)

Veterinary assistance was requested initially because the Navy had no veterinary assets. The first veterinary officer to serve as a project advisor came from 5th Special Forces Group. The second and third officers came from the 1st Civil Affairs Battalion. Their mission consisted of four basic tasks; to advise the Navy Assistant Chief of Staff for Psywar and Vietnam Navy Welfare in veterinary matters regarding the animal husbandry program as a part of the overall food supplement program, to teach both U.S. Navy advisors and Vietnamese sailors the proper care and treatment of domestic animals, to keep the morbidity and mortality as

low as possible by practicing preventive veterinary medicine and by treating sick animals, and to establish a supply system whereby the U.S. Navy could procure veterinary supplies as needed.(25)

Memorandums were continually prepared by the veterinary advisors. Subjects included proper feeding, diagnosis and treatment, and care and housing of domestic animals. Directives regarding vaccination and feeding schedules were also disseminated to field units.

Approximately 50% of the veterinarian's time was spent on routine field trips with the area advisors. Lengthy discussions were held with the animal caretaker and the unit commander regarding proper care and feeding of pigs and chickens.(26)

The veterinary advisor worked out of the COMNAVFORV
Headquarters in Saigon, and received calls for assistance
there. In cases of emergencies, like an epizootic, the
veterinarian would either drive, or arrange for the first
available flight to the area. Navy areas of operations
covered all four Coastal Zones, the Third and Fourth Riverine
Divisions, and the Rung Sat Special Zone south of Saigon.
Some of these areas were accessible only by boat or skimmer,
and a trip to visit one farm unit could take as much as a
week.(27)

Poor nutrition was the major problem in raising animals in Vietnam. Experienced veterinary practitioners estimated that over 90% of all animals in Vietnam were

undernourished or malnourished. The feeding of rice as the main staple was the problem since it is low in protein, some essential amino acids, and B vitamins. Calcium, phosphorous, salt and trace minerals are also severely lacking in rice.

Rice provides calories for energy but little else.(28)

Most animals in Vietnam received inadequate care.

Insufficient drinking water and poor ventilation were very common, as well as overcrowing, lack of exercise, and poor sanitation.

Disease Incidence

The climate of Vietnam is favorable for the growth of bacteria and fungi. In addition, there was a lack of qualified personnel, a non-functional disease reporting system, absence of any disease eradication programs, vaccines of questionable quality and malnourished animals. Animal morbidity/mortality rates were excessive as a result.

The most common disease observed in swine in Vietnam during this time was hog cholera. Transmissible gastroenteritis and bacterial scours in pigs were also common. Pneumonia and other respiratory infections were observed frequently as was the mastitis-metritis-agalactia syndrome. Erysipelas and foot and mouth disease were also diagnosed, and heat stroke was frequent when transporting animals.(29) To summarize, most swine disease in Vietnam was associated with poor husbandry practices and poor nutrition.

The hog cholera vaccine manufactured at the National Institute of Bacteriology in Saigon provided only short

duration immunity. Several hogs died of hog cholera only four to six months after vaccination. As a consequence, it was necessary to revaccinate pigs at the distribution centers prior to distribution to naval units in the field, then to revaccinate in the field at six-month intervals, or whenever hog cholera was diagnosed in the base areas. As a result of this intensified program, overall death rates were reduced drastically. Many units gained confidence and expanded their operations. (30)

Proper nutrition of the pigs and chickens became the veterinarian's primary concern during the program. A great deal of study was required to correct this problem, because every unit had different sources of animal feed. Some units had surplus rice, others had sources of American garbage, Vietnamese garbage, greens, fish, and even dog food. A protein concentrate was formulated and various mixtures were provided to the individual units, keeping economics and adequate nutrition foremost in mind. It was necessary to identify and treat every illness, but it was also necessary to place the blame on poor nutrition as the underlying cause.(31) Using sophisticated drugs to treat diseases which result from poor animal husbandry techniques and poor nutrition only covers up the underlying problem, and is a senseless procedure which is beyond the capability of most third world countries.

Newcastle disease was the biggest poultry killer experienced during the food supplement program. Chronic

respiratory disease (CRD) was common and was the scourge oflayer flocks. Coryza, fowl cholera, and Marek's disease were also diagnosed. Omphalitis and pendulous crop affected chicks and cannibalism was common. In addition, some layer flocks had a big problem with bumble foot infections. But aside from CRD, the main problems with layers were improper feeding, ventilation, lighting and inability to cull poor producers.(32)

The proponents of the food supplement program learned the necessity of determining early the desires of the people. For example, in some areas, ducks were more popular than chickens. As a general rule, Vietnamese do not like white pigs, chickens, or eggs. Because of this prejudice, white eggs and pigs would bring a lower price at the market than red, black, or brown animal products. The thinking of the people varied from area to area, emphasizing the importance of performing a detailed survey of the target group before a project began. (33)

Program personnel found during the course of the project that broiler pilot projects involving 2-day old chickens and enough feed to raise them to market age, were more popular than the swine pilot projects, which consisted of two breeder gilts and a 10-week old boar, plus 120 kg of swine feed. The feed was only enough to last one month.

Afterwards, the Vietnamese base commander was responsible for providing feed for a lengthy period until the offspring pigs were marketable. A tremendous financial burden was placed on

the unit commander. In most cases, he was required to "borrow" rice from the unit mess or use whatever garbage might be available. Results were inadequate feed, malnourished gilts and boars, small litters farrowed, poor milk production by the sow, high piglet mortality and discouraged sailors.

As a result, a feeder pig program was promoted as an adjunct to the breeder programs. Feeder pigs were distributed at 10 weeks of age, fattened for four months, and then marketed. Thus, nutritional requirements were not as critical, pork was produced faster, and income was provided which could be used to buy more feed for the breeder pigs and new feeder pigs.(34)

The Republic of Vietnam had a critical shortage of veterinarians and other personnel trained in animal husbandry. In 1970 there were only seven active Vietnamese veterinarians in the entire country; one was full-time military and the others were reservists. There was no veterinary college in Vietnam, and students interested in pursuing veterinary medicine had to go abroad to study. Because of the expense and the low status of veterinarians in Southeast Asia, few students were willing or able to go. As a consequence, the veterinary advisor to COMNAVFORV, as well as most other U.S. military veterinarians, was without a qualified veterinary counterpart. (35)

In many Vietnamese Navy units the sailors assigned to care for the animals were not interested in the job for two

reasons. First, the animal caretaker received no direct benefit from the job. Second, caring for animals is considered to be work of a very low status. In fact, in many instances, the animal caretaker was assigned the job as punishment for a previous military offense.

Animal health products were critically short in Vietnam. Under a former quota system, only \$1.2 million of animal drugs could be imported each year. Often, because of a lack of foreign currency, even this quota could not be met. As a result products were not available, or were only available through the black market, and hoarding was a common practice. The black market prices rose even higher and many illegal retailers resorted to adulteration of products. The result was very expensive products of questionable quality.(36)

Animal Vaccine Production Program

Under the provisions of an agreement between the Departments of State and Defense, a contract was entered between the U.S. Army Veterinary Corps and the U.S. Agency for International Development wherein the Army Veterinary Corps provided a five-man team for duty with USAID/Vietnam. The mission of the team was to provide professional assistance to the Government of Vietnam National Institute of Bacteriology in animal vaccine production and diagnosis of animal diseases. The program was designed to directly support the government of Vietnam program of immunization against eight of that country's most devastating animal diseases; hog cholera,

rinderpest, fowl pox, Newcastle disease, swine pasteurellosis, swine salmonellosis, bovine hemorrhagic septicemia, and fowl cholera.(37)

The team of veterinary specialists consisted of an epidemiologist, a pathologist, a microbiologist, a virologist, and a diagnostician. They were assigned on a staggered basis, beginning in 1967, to allow for a two-month overlap and continuity with their successors. They occupied a modest facility in Saigon which had been erected in 1961 as part of an earlier USAID vaccine program which had failed because of non-availability of adequately trained Vietnamese laboratory specialists.

The team immediately found that the Vietnamese domestic animal population had little disease protection based on existing immunizing agents and programs. Hog cholera losses alone accounted for thirty per cent mortality. The initial team effort was concentrated on vaccine production and associated procedures related to hog cholera control.(38)

With the assistance of the US veterinary specialists, work continued to expand and improve the facilities and quality of service to a point where, by 1970, reliable vaccines were available for purchase throughout the country by the farmer and livestock producer. A critical evaluation of the protective capability of immunization agents was now possible and the livestock producer could plan on raising his animals to a marketable age without an unacceptable loss from diseases.

This program was not without its negative aspects.

The facilities and equipment were outmoded or in disrepair,
and vaccine production methods initially were antiquated,
crude, and time-consuming. Technicians were poorly trained in
basic sanitation and sterility techniques so necessary to
vaccine production. Improper vaccine distribution and lack of
sufficient subsistence expenses for vaccinator personnel in
the field impeded progress toward the ultimate goal, which was
improved animal health.(39)

The vaccine program pointed out the necessity, in similar assignments, for U.S. personnel to be flexible, imaginative, and to use their ability to improvise when faced with such problems. The lag in supply procurement made homegrown solutions necessary to gain immediate and continuing progress.

Also, one of the most difficult lessons to learn in such an assignment was to insist that local personnel do the work. It was often far easier and quicker to relegate the indigenous personnel to the sideline and take over completely. This, however, does not solve an important problem—that of improving the capability of the personnel to manage for themselves. Even though it takes infinite patience and a constant recognition of the requirement to serve primarily as an advisor and teacher, this was the only approach that offered long-range and lasting improvements.(40)

Rabies Control Programs

Rabies problems in animals in Vietnam required constant surveillance and use of immunization programs to control the disease. Up to twenty-five percent of the heads collected and examined in the laboratory by veterinary and other Medical Department officers were positive for rabies.(41) Most of the positives were found in young dogs four to six months of age; however, heads from other warm-blooded animals were regularly submitted. To emphasize the significance of rabies in Vietnam, the Pasteur Institute in Nha Trang reported that 250-300 people died each year of the disease. The eleventhousand people who were bitten each year were treated with anti-serum or Pasteur serum that was developed in Nha Trang.(42)

Rabies control programs were established in Vietnam, not only to protect Vietnamese civilians from this fatal disease, but also to protect American and Vietnamese soldiers. Since many military installations were adjacent to cities and villages, dogs continually came in through the gates and fences onto the installations. The civilian-owned dog was a constant threat. Military personnel also continually frequented the cities and villages, exposing themselves to rabid animals. It was difficult to distinguish between rabies immunization programs that constituted civic action and those designed to protect American and Vietnamese soldiers, because the motivations and the procedures were usually mutually encompassing.

For example, the MACV Veterinarian began a rabies vaccination program in 1970 to vaccinate dogs in the areas of Vietnamese training posts. Since over one-third of the Vietnamese soldiers were married, and kept their families with them, the program benefited their civilian dependents as well. Rabies immunizations were a common component of preventive medicine procedures performed when veterinary personnel travelled to remote villages with other medical personnel as part of MEDCAP teams.(43)

Two examples related to rabies control emphasize how the enemy can use propaganda to reverse the effect of well-intentioned civic action programs. The first involved the efforts of a U.S. Army veterinarian who saw the need to establish a rabies vaccination program, but had no funds to procure vaccine. An investigator from Walter Reed Army Institute of Research, who was studying plague, agreed to provide the rabies vaccine in return for a blood sample from a certain number of dogs. This appeared to be a mutually beneficial arrangement. But, as the program progressed, the Viet Cong advertised among South Vietnamese soldiers that the Americans had run out of blood and were injecting the dogs and withdrawing blood which would later be transfused into wounded soldiers. The program was immediately terminated.(44)

The second example concerned a combination population control/rabies control program in which Vietnamese soldiers killed packs of dogs that roamed military installations. This program was by the Americans to reduce the number of

ferral dogs. However, Viet Cong propaganda advertised it as a harvest of dogs to feed ARVN soldiers. Dog meat is eaten in Vietnam, but only as a last resort, and people who eat dog are considered to hold the lowest status in their society.(45)

Lessons Learned in Vietnam

Conflicts similar to Vietnam are occurring in many regions of the world today, which increases the likelihood that American Forces could again become involved. Discussion of deficiencies in the Vietnam effort reinforces the value of past experience in maintaining our readiness for the future. Concentration in this thesis on negative issues is not a statement of the belief that all veterinary civic action programs in Vietnam were poorly planned and conducted. On the contrary, there is hope that those outstanding efforts can be improved upon by development of concrete policy and guidelines early in the conflict.

The potential effectiveness of civic action was diminished considerably because of a lack of coordination between the U.S. Forces veterinary personnel and the appropriate GVN authorities in Saigon. Although the military civic action subcommitte was organized in May 1969 to coordinate U.S. programs, the glaring absence of a centrally coordinated effort that included the desires and efforts of the GVN refuted one of the basic civil affairs principles: during the planning stage, consider the wishes of the target population first.

The civic action subcommittee managed U.S. veterinary assets in response to requests for support. It did not correct a basic deficiency for which it was capable, namely that of providing single-source, standardized policy and guidelines regarding the conduct of veterinary civic action. Rather, most of the programs were conducted in a fragmented and haphazard manner.

An example of the need to coordinate centrally was exemplified by an incident in which USAID was training indigenous people to administer vaccinations and other veterinary medical procedures. They wanted to control what U.S. military personnel did on civic action programs so the Vietnamese people could get the vaccine through the channels they had established, get the equipment through the channels they had established, and actually manage the entire program. Without knowledge of the USAID project a veterinary team from the Fourth Terminal Command went into the Bien Hoa area and vaccinated a large number of pigs, which was directly contrary to the desires of USAID. This group not only damaged the efforts of another program, but they violated the "advise and assist" rule of civil affairs by conducting a program solely with American assets (46).

As Americans tired of the initial reluctance of GVN veterinary personnel to become more actively involved in civic action, the American attitude of "it's easier to do it myself than to show somebody else," violated another civil affairs principle: encourage maximum participation by indigenous

personnel. In most projects, it was difficult to detect any Vietnamese flavor. This may have satisfied some American egos, but it did nothing to enhance the Vietnamese people's confidence in their government.

No special effort was made by the U.S. Army to assign specially trained and motivated veterinarians to work in Vietnam. No intensive program existed to train veterinary personnel in the language, geography, customs, culture, history, politics or socio-economics of Vietnam. No special emphasis was placed on scientific, professional and civil affairs vocabulary in the Vietnamese language. The language barrier between the Americans and the Vietnamese was almost insurmountable. When a veterinary program was proposed, a great deal of meaning was lost between the written proposal and how the Animal Husbandry Chief interpreted it. Sometimes he would not understand but would say that he did to avoid embarrassment or to win favor with the Americans.(47)

I think the big problem was that many personnel, especially the officers, when they arrived in Vietnam, had no idea of why they were over there, or what the job was. And until they could be indoctrinated and motivated, they weren't very effective. It would seem to me that we should have had a training objective before they were sent overseas. Many of them were just sent over there with no knowledge at all of what they were getting into.(48)

COL Quigley Commander, 4th Medical Detachment

VETERINARY CIVIC ACTION IN LATIN AMERICA Introduction

In the post-Vietnam era, Civil Affairs never really died. Several Latin American nations adopted the concept and have never abandoned it, although American support for such programs ceased for about a decade from the early seventies to the early eighties. Latin American governments see the use of their military forces in programs of "accion civica" as a workable solution to the social and economic problems associated with their individual low-intensity conflict experiences.(49)

From 1983 to 1985 the Soviet Union poured fifteen billion dollars into Central America, five times the American spending during that period. Over eighty percent of Soviet spending was for non-military programs.(50) In response to the growing Soviet-supported educational and civil assistance in Latin America, and the revived interest in deterrence of local insurgency, the U.S. "dusted-off" its civil affairs doctrine and resumed limited support of host nation military civic action in 1983 in Honduras. The resurgence, however, has been filled with much rhetoric but very little substance.

Literally, next to nothing has been spent to develop effective approaches for dealing with low-intensity conflict on the north-south axis of the Americas. It is not likely that, in the foreseeable future, dollar spending priorities will shift from traditional East-West emphasis on preparation for the "big war."

So, what is the answer? Major General William P. Winkler, concluded in a study for the Surgeon General that military medicine is the least controversial, most costeffective means of employing military forces in support of U.S. national interest in low-intensity conflict situations.

General Winkler also determined that the most appropriate role for military medicine in low-intensity conflict lies in nationbuilding rather than in the traditional combat service support role.(51)

There are some good reasons why U.S. support of civic action remains small in scale. The first is the legacy of Vietnam. Our military forces have managed to assess their involvement in Vietnam and overcome the stigma associated with that conflict, but some agencies of the government are still using Vietnam as a standard by which their policy is established. The best example is the Agency for International Development (AID), which was heavily involved in agricultural and livestock development programs in Vietnam.

In Latin America, however, AID is de-emphasizing "grassroots" projects, in favor of development programs which begin
at higher levels and "trickle" down to improve the lot of a
larger population of people. For example, in Vietnam the
country-wide program of Civil Operations and Revolutionary
Development Support (CORDS) provided training and support to
individual farmers in an effort to improve the protein content
of their daily food intake.(52) Under present philosophy, an
AID project in Panama is building a centrally-located bulk milk

pasteurization facility designed to benefit a large number of local dairy farmers, as well as to improve the health of the area population.(53)

As recently as December, 1987, AID was supporting only two small veterinary programs in Central America. The explanation given for the paucity of interest is that such programs did not work in Vietnam because they benefited only big landowners with large herds of livestock. AID feels the subsistence level peasant in Third World countries is too poor to own animals, and, therefore would not receive a benefit from animal health improvement programs. (54)

Both the U.S. Army Veterinary Service and AID developed a cordial and mutually supportive relationship in Vietnam. Military veterinarians found themselves well-suited to supporting the village-level animal medical programs. But with the abandonment of funding for such programs in favor of longer-term, infrastructure-developing programs in Latin America, military veterinary support may not reach the levels experienced in Vietnam.

The second obstacle is the legal system of the United States. Humanitarian assistance, as well as nationbuilding, is a Department of State function that is normally performed with AID funds. Title 10, U.S. Code, Section 124, prohibits the use of DOD-appropriated funds for humanitarian assistance. Until that law is changed and humanitarian assistance is recognized as a legitimate and direct military mission apart from the ability to respond to Department of State and AID requests,

particularly in a low-intensity conflict, military civic action cannot legally occur.

Lieutenant Colonel James A. Taylor proposes three possible solutions; (1) Change the law to reflect the reality of the times, (2) Expand humanitarian activities on planned exercises by the Office of the Secretary of Defense, and its support of the establishment of a formal program under the Foreign Assistance Act, or (3), Expand the role DOD should play under Department of State authority and in close cooperation with AID.(55)

Until such changes are made, and without funding from other government agencies, civic action cannot be supported by our military personnel under the name of civic action.

Consequently, humanitarian assistance was resumed in Latin America under the guise of training exercises for U.S.

personnel. The most popular of these exercises involving medical personnel is the Medical Readiness Training Exercise (MEDRETE), which is an exact replica of the traditional Medical Civic Action Program (MEDCAP).

The MEDCAP involved medical teams of the various specialties and their host nation counterparts, who established temporary health stations in remote areas to provide outpatient medical care for periods up to five days. The major purpose of such missions was to enhance the popular perception of U.S. military involvement in the host nation as well as to emphasize the good works of the host nation government itself. A highly coordinated effort between military and civilian health care

agencies with a sizable representation of host nation medical authorities was necessary to insure success.

A MEDRETE is planned and conducted in the same format as a MEDCAP; however, according to Lieutenant Colonel William H. Thornton, (57) MEDRETES are designed to enhance our personnel's ability to deliver health service support under austere conditions, and any benefit that may accrue for the host nation military or civilian populace is considered as "incidental" to the training of the U.S. medical personnel involved. Assuming the preceding description of terminology is currently official, any reference to medical exercises, of which veterinary civic action was a part, will be referred to as MEDRETE rather than MEDCAP, although it is doubtful there is any functional difference in the two terms.

Honduras, 1983-1987

In July 1983 the U.S. began a series of combined military exercises with Honduras. The 47th Field Hospital was deployed from Fort Sill to provide medical support to U.S. Forces. The 73d Medical Detachment (VS) from Fort Bragg, a sixman unit, was attached to the medical element to provide food inspection and routine veterinary medical support. The initial field units belonged to FORSCOM, and were rotated on sixmonth cycles. Later, positions were filled individually out of Health Services Command on the same rotational basis. Very early during the exercises the medical element began to send teams into villages throughout the country from the base camp near Comayagua. (58)

MEDRETES consumed approximately twenty-five percent of the veterinary team's time, although emphasis on civic action varied with the interests of personnel assigned. Typically a MEDRETE, in conjunction with the Honduran Ministries of Health and Natural Resources, was conducted on Wednesday of each week, but would sometimes last for three or four days. Transportation was typically by road, but helicopter transport was routinely needed to access remote areas.(59)

Veterinary Team Five, which was assigned to Honduras from 15 June to 15 December 1985, participated in fifty-eight MEDRETES. Treatments were performed on a variety of animal species, to include: dogs, cats, horses, cattle, burros, and goats. Primary treatments were rabies vaccinations and treatments for internal and external parasites. Additionally, some surgical/medical treatments were provided.(60)

Total Animal	Treatments: 16,843
Rabies Vaccina	ations _5,557
Deworming	7,837
Hog Cholera Va	accinations 3,444
Minor Surgery	5

TABLE 1. Summary of Veterinary Procedures, Team No. 5 (61)

A survey team from the medical element performed preexercise coordinating visits to target villages. A
representative from the veterinary team did not routinely
accompany the survey team. This was not considered to be a
disadvantage because procedures were more or less "standard"
from one village to another, with the only difference being in
animal population, or perhaps the number of the various species
of animals in the target area. Minor surgical procedures and

treatment of individual ailments were commonly performed, but the preponderance of activity was administration of rabies vaccinations and deworming of animals.

Occasionally the veterinary team would operate separately from the remainder of the medical element in response to an epizootic or other veterinary specific support requests. On one day in November 1983, a combined Honduran/U.S. veterinary team vaccinated 1023 horses, burrows, and mules in the village of La Playa, which was experiencing an epizootic of Venezualan equine encephalomyelitis.(62) Other areas of the country, such as the Department of Yoro, are perpetual enzootic rabies areas. Veterinary teams routinely vaccinated every animal in an area to break the transmission cycle of the disease.

The wildlife reservoir of rabies in Central America is the Vampire Bat. A unique method for control of Vampire Bat populations in rabies enzootic areas was successfully applied in the Department of Yoro. The method involves the capture of the bats in a specially constructed net, and application of the anticoagulant compound, diphenadione, to the bat's underside or back. The bat is released, and flies back to its lair, where the remainder of its group proceed to clean the compound from the painted bat's body, and are destroyed by the compound. The technique is cheap, easy to learn, and all the materials are available from local sources.(63)

Hog Cholera Vaccination/Eradication Program

In 1984 hog cholera was reported by U.S. government veterinary officials working in Honduras to be the most devastating disease affecting the Honduran livestock industry.(64) A joint/combined Honduras Ministry of Natural Resources, USAID, USDA, and US Army effort was originated to control and plan to eradicate hog cholera from Honduras. USAID purchased 100,000 doses of vaccine, and the US Army veterinarians assigned to the JTF-Bravo medical element coordinated and carried-out a system by which the vaccine was distributed and administered equally among the departments. Vaccination teams were made up mostly of Honduran technicians.(65)

In the Fall of 1985 a proposal was made to establish a hog cholera vaccine production laboratory in Honduras. USAID provided the funds for the program, and the Honduras Armed Forces volunteered their personnel and transportation assets to monitor restricted animal movement and quarantine enforcement as well as direct participation in vaccination of the swine. A US Army Veterinary Microbiologist, and a US Army Veterinary Epidemiologist, were dispatched to Honduras to assist in setting up the vaccine producing facility.(66)

Lessons Learned

During the early weeks of the exercise period Honduran support was very enthusiastic. It was seen as a change from the normal routine. But, as the new began to wear off, support from the Honduran Armed Forces and/or government officials

became more difficult to obtain on a continuing basis. With training as the "official" primary mission, and host nation development as a secondary consideration, most U.S. participants worked without their Honduran counterparts, resulting in MEDRETES made up almost totally of Americans.

In many cases personnel rotations did not overlap with one another, thus losing a great deal of continuity. The absence of a requirement for routine debriefing of departing personnel, or pre-assignment briefing, precluded the exchange of valuable knowledge and accumulated expertise.

Assignments of veterinarians were made without consideration of prior experience or knowledge of the requirments of the assignment. Of the nine veterinarians assigned to Honduras from 1983 to 1987, six had been in the Army for less than two years upon assignment. Only two of the nine had a working knowledge of the Spanish language.(67) Assignment personnel did not consider the need to have a knowledge of the Honduran culture and the political system; or even an introductory knowledge of the U.S. Country Team concept. Assignment of enlisted technicians was conducted in much the same haphazard manner as the officers.

The actual mission of the Veterinary Element was not plainly stated, which caused confusion for many assigned personnel as to the extent of veterinary activities in Honduras. Two after-action reports mentioned the need for more command direction and a less inconsistent mission statement.

Most veterinarians mentioned the inadequacy of the supply procurement process in their after-action reports. This was attributed to the unfamiliarity of newly assigned personnel with the unique system that existed for obtaining veterinary medical supplies in Honduras.

There seemed to be inconsistency on the part of assigned personnel as to whether they were taking part in a training exercise or a civil affairs operation. Comments in after-action reports discuss the need to adhere to civil affairs concepts, such as insuring host nation participation, winning the favor of the populace, and the need for Americans to advise and teach techniques to host country personnel. Yet, command emphasis was plainly on training for U.S. military personnel.

The target population generally has no concept of what motivates our actions. Regardless of whether they are being used as a training aid or as the target of a Psyops/Civil Affairs operation, our operators must realize that ultimately only one thing counts—the perception of the target populace resulting from our actions in support of the host nation government. This point appears to have been overlooked in recent LIC medical support doctrine.(68)

USSOUTHCOM Area of Operations

The 216th Medical Detachment (VS) was activated on 1 April 1985, and was attached to the 142d Medical Battalion, Fort Clayton, Panama. It was activated in response to increased demand for veterinary support of Southern Command

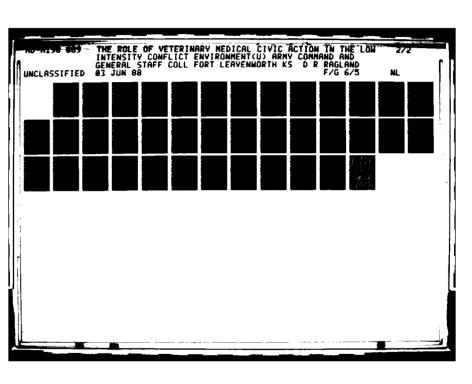
directed exercises based on the favorable reaction to veterinary participation in exercises in Honduras. The 216th was a standard six-member Veterinary JA Team, Small, which was primarily structured as a food inspection team with limited animal medical capability. The 0-3 Commander, a veterinarian, was assisted by five technicians, typically four food inspection specialists, and one animal care specialist. However, in anticipation of greater involvement in animal health missions in Latin America, the number of animal care specialists was increased to two, and the number of food inspection specialists reduced to three.(69)

The anticipation proved to be correct, for, during its first year, eighty-five percent of 216th Medical Detachment involvement in major combined/joint exercises consisted of animal health related participation. The nine exercises from April 1985 through April 1986 accounted for approximately fifteen-thousand medical procedures on seven-thousand animals. A description of two typical exercises follows.

Exercise Fuerzas Unitas Bolivia '86, 26 April-4 May 1986

Planning for this SOUTHCOM-directed exercise began a year prior to its actual occurrence. A typical SOUTHCOM exercise is a combined/joint exercise between U.S. Forces and those of the host nation, and is tactical in nature.

Increasingly, medical teams have been deployed as elements of the same exercise to conduct training with medical personnel of the host nation forces in areas where health care is limited,





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

or in areas where civic action projects are deemed necessary to bolster support for the host nation government.

In January and February 1986, the Commander, 216th Medical Detachment accompanied other planners from the SOUTHCOM staff and exercise support element to Bolivia to conduct pre-exercise planning. The various medical participants met with their Bolivian counterparts and conducted site surveys of proposed MEDRETE locations. Local village officials, usually the Mayor, but sometimes a schoolteacher or a prominent citizen, were visited. Their input was considered instrumental in the final decision to use their village as an exercise site. The veterinarian conducted a rough animal population survey, and determined the local indigenous diseases. This information was typically available from his Bolivian counterpart. As there were no veterinarians in the Bolivian armed forces, the counterpart was an employee of the government agency known as SENARB, the Bolivian Ministry of Agriculture.

The three main livestock diseases in the Valle Alto area of Bolivia, where the exercise was to take place, were foot-and-mouth disease, rabies, and brucellosis. Five people had died there the year before of rabies infection.(70) Each case resulted from contact with a rabid dog. The large population of sheep in the Valle Alto suffered from Oestrus Ovis infestation. There were spotty areas of undernutrition in both the livestock and companion animal populations. There was no veterinary care available in the area, and the incidence of

parasite infestation, both internal and external, was assumed to approach one-hundred percent.

With this information, the two counterparts proceeded to form a plan in which they would inoculate or treat all the animals for particular diseases and parasites. Brucellosis and hoof-and-mouth disease were ruled out because these are long-term problems that can not be dealt with during an exercise of only a few days. A rabies vaccination program was agreed upon to relieve the anxiety and justifiable concern of the people in the area. Treatment of sheep for Oestrus Ovis was adopted, as well as a general deworming program for all animals. Vitamin and mineral injections would be given to malnourished animals, and incidental treatments would be administered as needed.

Members of the exercise medical element were deployed on 26 April via C-141 from Howard Air Force Base, Panama. They arrived in Santa Cruz, Bolivia that afternoon, and were shuttled via U.S. Air Force C-130 the next morning to Cochabamba, where a base of operations was established at the Bolivian School of Sergeants. Five days of MEDRETEs were conducted from 28 April to 2 May in three villages of the Valle Alto. Each day the MEDRETE teams travelled to their worksites via bus or Bolivian military vehicles, and returned at night to Cochabamba. On 28-29 April they worked in Tolata, on 30 April-1 May in Toco and Florisancho, and 2 May in Paracaya.(71)

The Bolivian veterinary participants did not materialize at first. The military exercise was bitterly opposed by certain factions within the Bolivian government,

which had an inherent distrust of the military, as do most Latin American civilian governments. The veterinary counterparts, being government employees, boycotted their portion of the exercise, forcing the Americans to proceed unilaterally. On the fourth day, after special appeal through the combined staff, a Bolivian government veterinarian and a Bolivian soldier who was attending veterinary school, joined the American veterinary team. The soldier/student was very positive, although he was in a learning mode during the two days of his participation. The Bolivian veterinarian did not offer his help; he was very reclusive and appeared to be participating under protest.

The U.S. veterinary team was made up of one veterinarian and two technicians, one of whom was a native Spanish speaker. They were accompanied each day by two Bolivian military policemen. Unlike the remainder of the MEDRETE team, who established a stationary medical post inside each village, the veterinary team moved on the periphery of the villages from one small farm to the next. The team would walk several miles in one day. The spectacle of three Americans in battle dress uniforms with rucksacks on their backs, being accompanied by two Bolivian military policemen, was frightening to people unused to outsiders; especially considering the negative propaganda which preceded the MEDRETE teams.

The opposition portrayed the Americans as Drug Enforcment Agency (DEA) agents disguised as soldiers, whose main purpose was to destroy coca fields. By their movement

through the fields, the veterinary team indeed resembled DEA agents. The opposition also convinced a number of villagers that the Americans had come to kill their animals, and the medication and injections would render their animals sterile. Such propaganda precipitated an immediate barrier between the people and the teams.

The absence of Bolivian counterparts during the first three days did not improve the credibility of the veterinary team with the local people. About half of the first day in each village was spent gaining the confidence of the people. The native Spanish-speaking member of the team carefully explained the purpose of each treatment and its benefit. Soon, the people realized the team's intentions were not harmful, and by the end of the second day those who would have nothing to do with the Americans on the first day were inviting them to drink "Chicha", the local drink, which was a sign of social acceptance.

Because there were no corrals, working chutes, or automated head-gates for handling livestock, the use of ropes to restrain animals was popular. The people were so impressed with the American team's ability to "take-down" a fifteen-hundred pound ox for treatment using only a rope, they requested classes on restraint and treatment techniques.(72)

One hard-earned lesson in treating animals under austere conditions is that it is better to inject medications than it is to administer them orally. If an animal is forcibly taken down, it is exerting itself and gasping for air.

Forcing medication into the mouth at that time could inadvertently send medication into the lungs, precipitating foreign-body pneumonia.

The nature of the animal population required the team to walk great distances in the discharge of their work. They were forced to travel as light as possible, and in some cases, had to abandon a planned treatment regimen. For example, one rucksack filled with medications and supplies, and one "six-pack sized" portable ice chest for vaccines, were standard equipment. The plan to use a newly innovated high-pressure, backpack mounted, multi-injection apparatus to speed vaccination procedures proved to be an extra burden. The machine also proved to be slower and more dangerous to use around forcibly restrained animals than single-use syringes and needles. Spraying for external parasites was abandoned on some occasions because the remoteness of the animals precluded the carrying of a backpack spray apparatus. (73)

Following is a summary of veterinary procedures preformed during exercise Fuerzas Unidas Bolivia '86: 28-29 April 86

Tolata

- 83 dogs dewormed, 70 rabies vaccinated, one treated for conjunctivitis; one injected with penicillin for respiratory infection.
- 124 sheep treated with Neguvon for Oestrus Ovis infestation; one treated with vetropolycin for conjunctivitis.
 - 9 cats dewormed; four rabies vaccinated.
 - 37 cows dewormed with Levamisole; 33 blackleg vaccinated; three injacom injections.
 - 53 pigs dewormed with Strongid-T; one injacom injected; one treated for conjunctivitis.
 - 6 donkeys dewormed with Strongid-T.

30 April-1 May 86

Toco and Florisancho

- 54 cattle rabies vaccinated; 48 dewormed; one injected with Injacom; one treated for an umbilical absess.
- 70 dogs dewormed; 61 dogs rabies vaccinated.
- 84 sheep dewormed.
- 14 cats dewormed; three rabies vaccinated.
- 4 donkeys dewormed.
- 28 pigs dewormed.
- 1 qoat dewormed.

2 May 86

Paracaya

- 30 sheep dewormed.
 - 8 cats dewormed; four rabies vaccinated.
- 2 rabbits dewormed.
- 20 dogs dewormed; 16 rabies vaccinated.
- 85 cattle rabies vaccinated; 70 dewormed.
- 6 donkeys dewormed.
- 11 pigs dewormed; one treated for a mandibular absess.

3 May 86

School of Sergeants, Cochabamba

5 dogs rabies vaccinated; 5 dogs dewormed.

Total animals treated

761

Total procedures

1060

Exercise Blacklight X, 13-18 July 1986

The proponent for Blacklight series MEDRETES was U.S. Military Assistance Advisory Group, Panama (MAAG), as part of their Military Assistance Program (MAP) in support of the Panama Defense Force. The Panama Defense Force had a well-organized, high-priority civic action organization which was well-suited for combined medical exercises with the Americans.

Because these exercises were frequent, (six to eight per year) the planning and execution were much more efficient than SOUTHCOM directed exercises. A cordial relationship normally developed between Panamanian and American counterparts who worked together on several exercises. Typically planning

meetings and site surveys began three months prior to the exercise. A veterinarian was routinely included in the site survey group.

Blacklight X took place in the Darien province of eastern Panama bordering Colombia, an area of thick jungle with Chocoe and Cuna Indian as well as Panamanian villages, interspersed. The combined Panamanian/American government agency, COPFA, maintains surveillance stations throughout the Darien region to monitor the animal population to prevent the spread of foot-and-mouth disease from South America. COPFA agents normally participated with the Panamanian and U.S. military forces when they conducted civic action projects in Darien province.(74)

The MEDRETE teams deployed on 14 July by U.S. Army boat (LCM) and CH47 helicopter to the town of El Real, on the Tuira River. A base camp was established at the school in El Real and personnel deployed to various villages during the next three days.

The exercise veterinary team consisted of four veterinarians; two U.S. Army, one Panama Defense Force, and one COPFA; and six technicians comprised of two from each component. Ten villages and surrounding areas were visited during the three day exercise. Each day the veterinary element was divided into four groups to make the best use of assets. Each group worked in a separate village for the day. COPFA station agents provided assistance in villages where surveillance stations were located. Procedures and treatments

provided were the "standard" MEDRETE vaccinations and dewormings which had evolved through several such exercises.(75)

One issue was the overpopulation of dogs in the village of El Real, where Panama's only recorded outbreak of rabies in dogs occurred in 1977. The village was surrounded by dense jungle on three sides and the Tuira River on the other. The dog population was virtually trapped in the village, and a proliferation in their numbers occurred. In a village with a human population of less than one-hundred, the dog population was close to two-hundred. The small size of the village caused an extreme concentration of people and dogs. Human and animal contact was inevitable. This situation was like a time-bomb waiting to explode. A short-term solution was reached when the village leader agreed to allow the exercise team to vaccinate every dog with a three-year immunity anti-rabies vaccine. over-population issue, which could only be resolved by destroying a number of animals and establishing a spay/neuter program, was considered too sensitive for military involvement, and was referred to the Panamanian government Ministry of Health.

Following is a summary of veterinary procedures performed during exercise Blacklight X:

15 July 1986

Paya (Cuna Village) 46 dogs dewormed, 42 rabies vaccinated.
9 cats dewormed, 5 rabies vaccinated.
La Boca de Cupe 59 dogs dewormed, rabies vaccinated.
(Panamanian Village) 15 horses dewormed.

Tuira (Panamanian)	38 cattle dewormed, blackleg vaccinated and injected with vitamin/mineral supplements. 6 horses dewormed.			
Pirre (Panamanian)	64 cattle blackleg vaccinated, dewormed, and injected with vitamin/mineral supplements. 38 horses dewormed and rabies vaccinated.			
	17 pigs dewormed.			
	(326 animals treated; 703 procedures)			
16 July 1986				
Pucuro	33 dogs dewormed and rabies vaccinated			
(Cuna Village)	13 cats dewormed and rabies vaccinated			
Union Chocoe	53 dogs rabies vaccinated and dewormed			
(Choco Village)	9 cats rabies vaccinated and dewormed			
	dewormed.			
Pirre	79 cattle dewormed and blackleg			
	· + + - =			
	13 dogs rabies vaccinated and			
	dewormed.			
	10 pigs dewormed.			
17 July 1986	•			
El Real	134 dogs dewormed, 114 rabies			
(Panamanian Village)	vaccinated.			
_	79 horses dewormed, 76 rabies			
	vaccinated.			
	14 cats rabies vaccinated and dewormed			
Morritos (Cuna)				
Tigre (Cuna)				
	13 cats dewormed and rabies vaccinated 53 dogs rabies vaccinated and dewormed 9 cats rabies vaccinated and dewormed 13 horses rabies vaccinated and dewormed. 2 monkeys dewormed. 79 cattle dewormed and blackleg vaccinated. 22 horses rabies vaccinated and dewormed. 13 dogs rabies vaccinated and dewormed. 10 pigs dewormed. (247 animals treated; 442 procedures) 134 dogs dewormed, 114 rabies vaccinated. 79 horses dewormed, 76 rabies			
Mobal laimals Mossbell				
Total Animals Treated:	00/			

RESULTS OF THESIS SURVEY

Total Procedures Performed: 1,746

<u>General</u>

A survey of professionals with experience in veterinary host nation development projects in Latin America, determined

that there is a wide range of opinions and attitudes concerning the planning, conduct, and evaluation of such projects. This chapter describes results of the survey in detail.

Survey forms were sent to twelve individuals by prior agreement. Eleven responses were received early enough to be considered for compilation. Of the nine veterinarians who responded, eight were U.S. Army officers, the other an American civilian. The two other respondents were a Honduran animal husbandry expert, and a Panamanian physician. Both worked closely with American veterinarians in their respective COUNTRIES. Two respondents were civilian, and three were native-born Spanish speakers. Of the eight U.S. Army veterinarians surveyed, only three had a working knowledge of the Spanish language when assigned to work in Latin America. (76)

The intention of the survey was to generate discussion relating to the thesis topic which would add credibility to conclusions. Hence questions were formulated to be subjective, allowing respondents to elaborate more freely.

Objective of Programs

The survey group was asked to list the primary objective of the programs in which they participated. Table 2 shows responses in descending order from most frequent to least frequent. U.S. Army veterinarians thought disease control was their primary objective; whereas, two of the three Latin

American respondents perceived the U.S. objectives to be improvement of the American image.

	All Respondents	U.S. Army Veterinarians	Latin Americans
Disease Control	3	3	1
Improve Image of the U.S.	3	1	2
Train U.S. Military personne	1 2	2	
Improve Livestock Production	1	1	
Support Host Nation Govt/Mil	try 1	1	
Improve Quality of Life	1		
Table 2. Primary objective	of veterina:	ry programs.(7°	7)

Effectiveness of Programs

To the question, "Was your particular program effective as conducted?", most respondents qualified their answers. For example, one Latin American respondent said the project was successful from an American public relations standpoint, but it was not effective from an animal health improvement aspect.

Table 3 reflects these multiple answers.

	All Respondents		U.S. Army Veterinarians		Latin Americans	
	YES	NO	YES	NO	YES	NO
Improved Image of the U.S.	6	1	4	1	2	0
Improved Animal Production	1	5	1	3	0	2
Enhanced Military Training	2	0	2	0		
Improved Quality of Life	1	0				
Controlled Disease	0	1	0	1		
Table 3. Was your particu	ılar	program	effect	ive? H	ow?(78)

Project Improvement

The survey group was asked how they would have changed their particular projects to improve the results. Several respondents listed more than one possible improvement. Table 4 responses are listed in descending order from most commonly listed to least commonly mentioned. Language/culture

preparation and longer term projects were the most frequently mentioned improvements desired.

Continue Program for Longer Period of Time 6
Train U.S. Personnel in Culture, Language, Civil Affairs 6
Plan Program in More Detail 3
Conduct Follow-up Evaluation 3
Insure Local Government/Military Are More Involved 1
Obtain Command Support/Centralized Coordination 1
Provide Tangible Incentives For Target Population 1
Improved Resources (Money, Personnel, Supplies) 1
More Accurately Stated Mission 1
Table 4. What improvements would you have made?(79)

Methods of Evaluation

When asked if they had ever evaluated the effectiveness of their projects, only one of the eleven respondents said "yes". The follow-up question, "What is the best method for evaluating veterinary civic action?", will be answered by quoting the respondents.

"....Requires long-term view to fully evaluate."(80)

To properly evaluate this we must use follow-up reports from the agencies involved. Impact should be assessed at five-year intervals. Health assessment studies and host nation reports would provide a basis for conclusion.(81)

"Look at changes that occur at the grass-roots level. This requires detailed initial assessment with specific parameters set to measure production."(82)

As long as we are only allowed to visit an area once, we cannot follow-up on our work. We'll never know the result or consequences of our efforts until we establish long-term realistic programs.(83)

No real way to measure impacts; to measure human reaction is like testimonials. No scientific basis. Can only get a feel, considering local standards.(84)

Depends on the project. If it is a vaccination program, a pre-vaccination baseline disease incidence can be established. Then, a post-vaccination level of incidence can be determined; the difference is the effectiveness. But public perception is subjective. (85)

It is difficult to measure as with any preventive medicine program. Perhaps a post-exercise survey approximately one month or so after the exercise is completed, to determine public opinion. (86)

Best Use of Veterinary Assets

In a final question the survey group was asked to describe the types of civic action/nationbuilding projects that would most effectively and efficiently use U.S. Army veterinary assets. Nine people responded to this question, each outlining a preferred program.

The U.S. Army veterinarians were surprisingly uniform in their recommendations. Four of the seven who responded to the question specifically mentioned that programs had to be aimed at developing the host nation agricultural infrastructure, rather than total concentration at the individual level. Specifically mentioned by respondents were such projects as organization of agricultural cooperatives, bulk milk holding and pasteurization stations, introduction of genetically improved livestock, and national disease control and eradication programs. As depicted earlier in Table 4, these programs must be long-term to realize any benefit, from the standpoint of livestock production as well as to have a positive effect on the target population.(87)

Host nation military and government officials must control the program with less visible U.S. personnel acting as

catalysts in advisory/consultant and training roles. Decision on specific programs to be implemented must be based on the needs and desires of the host nation government and its people. Five of the U.S. veterinary officers said no single U.S. agency should attempt a program without prior coordination with other U.S. agencies and host nation counterparts.

The Honduran respondent proposed a program which would provide veterinary services to the remote areas needing help the most. But the number of areas would be limited, and each area would be visited at least twice a year. Since the traveling would be rough the team would work in the area for four full days, allowing two days for travel.

The group would not only deworm, vaccinate and treat animals, but would also try to teach the people simple techniques that would improve the health of their animals and their own living standards. This could be accomplished with simple and practical demonstrations. The group would motivate the people so they would eventually continue to practice good animal husbandry and medical care on their own, and the group could move to help another area.(88)

One veterinarian suggested that "canned" veterinary programs are not practical, and that each program must be tailored to the specific situation. His recommendation was a program designed to train paraveterinary personnel at the area and village level to develop a cadre of trained individuals who could assist and advise individual farmers.

Veterinary planners would meet with all host nation and U.S. agencies to coordinate and concentrate resources.

Afterward, training teams would teach basic health programs through demonstration and reinforcement.(89)

ENDNOTES

- 1. Donald Hallock, "No Battle Is Lost," Army Digest 22 (January 1967): 7-8.
- 2. Francis Kelly, <u>Vietnam Studies: U.S. Army Special</u> Forces, 1961-1971 (1973): 59.
 - 3. Interview, Col George Dixon, 26 September 1973.
 - 4. Interview, Col Joseph Quigley, 25 April 1974.
 - 5. Interview, Col Dixon.
- 6. Notes on employment of Veterinary Corps officers in the 5th Special Forces Group, Vietnam; unsigned, undated.
 - 7. Ibid.
 - Interview, Col Dixon.
- 9. Notes on employment of Veterinary Corps officers in the 5th Special Forces Group, Vietnam; unsigned, undated.
 - 10. Ibid.
- 11. The tranquilizer, Etorphine Hydrochloride (M-99), is a semi-synthetic opiate derivative. Its action can be reversed by Diprenorphine Hydrochloride (M50-50), a potent narcotic antagonist.
- 12. Michael Travis, "Civic Action Vet," <u>Army Digest</u> 25 (April 1970): 45.
 - 13. Interview, Col Quigley.
 - 14. Interview, Col Dixon.
 - 15. Ibid.
- 16. Letter, 3 May 1967, from Cpt J. Emmett Smith in Vietnam, to Cpt McCahan, Fort Bragg.
 - 17. Ibid.
 - 18. Ibid.
- 19. O.H. Seigmund and C.M. Fraser, <u>The Merck Manual</u>, Fourth Edition (1973): 259.
- 20. Howard Dunn and Allen Leman, <u>Diseases of Swine</u>, Fourth Edition (1978): 189.

- 21. Piperazine is an anthelmentic compound which is specific for the roundworm, <u>Ascaris suum</u> in this case.
- 22. Letter, 3 May 1967, from Cpt J. Emmett Smith in Vietnam, to Cpt McCahan, Fort Bragg.
 - 23. Ibid.
- 24. After Action Report, U.S. Army Veterinary Support To U.S. Navy/Vietnam Navy Animal Food Supplement Program, 29 November 1971.
 - 25. Ibid.
 - 26. Ibid.
 - 27. Ibid.
 - 28. Ibid.
- 29. Howard Dunn and Allen Leman, <u>Diseases of Swine</u>, Fourth Edition (1978): covers each disease in detail.
- 30. After Action Report, U.S. Army Veterinary Support To U.S. Navy/Vietnam Navy Animal Food Supplement Program, 29 November 1971.
 - 31. Ibid.
- 32. M.S. Hofstad and B.W. Calnek, <u>Diseases of Poultry</u>, Fourth Edition (1978): covers each disease in detail.
 - 33. Ibid.
 - 34. Ibid.
- 35. End of Tour Report, LTC Roland Stewart, USMACV Staff Veterinarian from July 1970 to July 1971. Report completed 10 May 1972.
 - 36. Ibid.
- 37. Manuscript of oral presentation, Animal Vaccine Production Program, Vietnam, 8 October 1968.
 - 38. Ibid.
 - 39. Ibid.
 - 40. Ibid.
 - 41. End of Tour Report, LTC Stewart.

- 42. Ibid.
- 43. Ibid.
- 44. Interview, Col Dixon.
- 45. Commentary on veterinary civic action programs conducted in Vietnam, 4 September 1968.
 - 46. Interview, Col Dixon.
- 47. Commentary on veterinary civic action programs conducted in Vietnam, 4 September 1968.
 - 48. Interview, Col Quigley.
- 49. LTG Alberto Ruiz Novoa, War Minister of Colombia, Fourth Conference of The Americas, Ft. Amador, Canal Zone, Southern Command Headquarters (1963): 70.
- 50. Joseph G. Whelan and Michael J. Dixon, <u>The Soviet</u> <u>Union In The Third World: Threat To World Peace?</u> (1986): 283.
- 51. James Taylor, "Military Medicine's Expanding Role in Low-Intensity Conflict," <u>Military Review</u> (April 1985): 26-34.
- 52. Frank Plonska, "Porkers Bring Home the Bacon," Army Digest 26 (January 1971): 45.
- 53. Pre-Exercise Survey, 216th Medical Detachment, Panama, 16 November 1986.
- 54. Telephone Interview, Raoul Pinajota, United States Agency for International Development (USAID) South American Bureau, 3 December 1987.
- 55. James Taylor, "Military Medicine's Expanding Role in Low-Intensity Conflict," <u>Military Review</u> (April 1985): 26-34.
 - 56. Ibid.
- 57. U.S. Army, <u>Army Medical Department Roles and</u>
 <u>Functions in Low-Intensity Conflict</u> (August 1987): 6-7.
 - 58. Personal recollections of the author.
- 59. After Action Report, Joint Task Force Bravo, Veterinary Service Detachment, Honduras, 15 June to 15 December 1985.
 - 60. Ibid.
 - 61. Ibid.

- 62. Personal recollections of the author.
- 63. Clay Mitchell and Richard Burns, Chemical Control of the Vampire Bat (May 1973).
- 64. Letter, 28 February 1984, from Dr. James Cavanaugh, USDA, Honduras, to U.S. Ambassador, Honduras.
- 65. After Action Report, JTF-Bravo, Veterinary Services Detrachment, Honduras, 1 December (1985): 1-5 and attachments.
 - 66. Ibid.
- 67. Information taken from the accummulated thesis topic surveys and the numberous after action reports reviewed.
- 68. U.S. Army, Army Medical Department Roles and Functions in LIC (August 1987).
- 69. After Action Report, 216th Medical Detachment, Panama.
 - 70. Survey Report, 28 January 1986, Cochabamba Bolivia.
- 71. After Action Report, 216th Medical Detachment (VS) Panama, Exercise Fuerzas Unidas Bolivia '86, 26 April-4 May 1986.
 - 72. Ibid.
 - 73. Ibid.
- 74. After Action Report, 216th Medical Detachment (VS), Panama, Exercise Blacklight X, 13-18 July 1986.
 - 75. Ibid.
- 76. The source for data presented in this section is derived from eleven survey forms. Much of the information was gathered by pooling the responses, making it difficult to cite a single source. Heretofore, the words "collective survey notes" will be used to document data accumulated from several sources.
 - 77. Collective survey notes.
 - 78. Collective survey notes.
 - 79. Collective survey notes.

- 80. Carl Kyzar, written response to research topic questionnaire.
- 81. David Goolsby, written response to research topic questionnaire.
- 82. Monty Freshwater, written response to research topic questionnaire.
- 83. Dan Ragland, written response to research topc questionnaire.
- 84. Dan Schilling, written response to research topic questionnaire.
- 85. Robert Pelant, written response to research topic ques' onnaire.
- 86. Fred Lyons, written response to research topic questionnaire.
 - 87. Collective survey notes.
- 88. Arturo Fortin, written response to survey questionnaire.
 - 89. Ibid.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

<u>General</u>

The preceding chapters have presented veterinary medicine in a different role from its traditional combat service support role. By taking a proactive stance, veterinary medicine takes itself out of the support mode and becomes an operational instrument which can be applied to achieve American policy objectives.

A number of adjustments have to be made to accommodate the expanded role of veterinary medicine in low-intensity conflict. Military command authorities and planners at all levels must change their attitudes and accept new concepts concerning counterinsurgency operations. Barriers to funding of operational projects must be removed. Personnel management systems must be changed to provide specialty-trained veterinarians and technicians who are prepared to work in LIC environments. Also, veterinary field teams should be reevaluated with an eye toward improving delivery of veterinary services in austere environments. These considerations will be reflected in the conclusions and recommendations that follow.

Conclusion -- In Vietnam, and recently in Latin America, people were assigned with no concept of their mission. After action reports indicate that many veterinarians were still trying to determine the purpose of their mission at tour's end.

Recommendation -- It is essential that the Veterinary Corps develop a written civic action policy. It would serve the following purposes:

- a. To provide the policy and guidelines required to conduct an effective, meaningful, and productive program.
- b. To outline a uniform system for obtaining equipment, supplies, and transportation for individuals working in civic action.
- c. To specify the limits and degree of support to be given by the veterinary contingent and the host nation government.
- d. To outline for non-veterinary commanders, the sources of veterinary assets available within the theater for their planning purposes.
- e. To establish an administrative office to coordinate, advise, assist, support and monitor civic action in the area of operations.

Conclusion -- The veterinary civic action committee created in 1969 was successful in centralizing the planning and in improving the efficiency of veterinary programs in Vietnam. No such organization has yet been considered for Latin America.

Recommendation—A full-time staff position should be created in the Office of the Command Surgeon, U.S. Southern Command, for a veterinary officer at the 0-4 level. The duties of the position would include:

- a. Developing veterinary support doctrine for low-intensity conflict.
- b. Act as the point of contact for agencies within Latin America requesting military veterinary support; act as point of origin for requesting veterinary assets to support missions.
- c. Coordinate support of SOUTHCOM exercises to include prioritization of missions and determination of how best to use limited veterinary resources.
- d. Conduct surveys and communicate with host nation agencies concerning proposed projects.

The NOE teams in Honduras and Panama, and the reserve veterinarians rotating to Latin America with their home units are the project executors. The U.S. Southern Command is the proponent of most of the exercises in the area. Presently, there is no stable link, no continuity, no planner to put the basic concepts together into workable, executable projects.

The SOUTHCOM Surgeon's Staff Veterinarian would be that person.

Conclusion—Non-veterinary animal husbandry experts who initiated animal production programs tended to overlook disease prevention and nutrition. In Vietnam animal production programs were started in areas where food was too scarce to support the people, let alone the animals. Likewise, a protein supplement program in Peru involving the raising of rabbits was initiated by the 3rd Civil Affairs Group. All starter rabbits died from myxomatosis, an endemic disease that is fatal to

rabbits. The planners had not considered endemic health threats, nor did they discuss their plans with local people who already knew why rabbits were not raised in Peru.

Recommendation -- It is necessary for veterinary personnel to be introduced early into Third World theaters where animal production projects are being considered.

Conclusion—In an attempt to circumvent funding constraints on humanitarian aid, the Army developed a vehicle called the Medical Readiness Training Exercise, which, in reality, was civic action in the name of training. Well—intentioned medical planners probably did more damage than good to the civil affairs concept. Operators in the field were told their primary mission was training U.S. personnel in austere environments. The individual soldier was led to believe it was taboo to consider a MEDRETE to be anything other than a means to train U.S. personnel. Doctrine writers specifically stated that any benefit to the host nation populace was strictly incidental.

Somebody failed to realize that the people of the Third World were more than training aids. Contact with host nation people, regardless of the name given to the operation, carries the responsibility to be concerned about the impact we have on target populations, which cannot be ignored. A poorly conducted contact with the populace causes the same damage, whether it is a MEDCAP or a MEDRETE. Some negative aspects of MEDRETES as presently conducted are:

- a. They are too short, never lasting more than a few days. Health benefits are minimal.
- b. The percentage of U.S. personnel on MEDRETE teams is overwhelming. U.S. military uniforms tend to overshadow host nation forces.
- c. Since MEDRETEs are designed to train U.S. personnel, very little training accrues to host nation forces.
- d. From the earliest MEDRETEs emphasis has been placed on quantity rather than quality. The number of vaccinations administered receives more attention than the accomplishment of the national IDAD strategy.
- e. No special selection criteria are used to determine MEDRETE team members. Almost none of the participants receive civil affairs indoctrination.

Medical teams are truly in a quandry over the training vs civil affairs enigma. If they conduct training according to the MEDRETE concept, training objectives may be accomplished, but they may fail to improve the perception of the target population toward its own government. Officially MEDRETES are training exercises, but after action reports look very much like civic action reports. Only two of nine veterinary professionals listed training as the primary objective of MEDRETES.

Recommendation -- Military command authorities at the proper levels must change the concept of training U.S. military personnel among the indigenous people of foreign countries without applying civil affairs concepts. Until corrective

measures are taken, veterinary and other medical operators in the field will have to "ride the fence."

An attempt to solve the funding crisis was made in November 1987 when USAID agreed to pay for portions of medical exercises with humanitarian aid funds. This positive step to legitimize the MEDRETE charade will allow commanders to emphasize civil affairs concepts to their soldiers prior to participating in medical exercises without fear of reprisal from higher authorities.

Conclusion--Follow-up and evaluation of the effectiveness of civic action have rarely been done. With the advent of humanitarian funds, evaluation will probably be necessary to justify civic action programs before Congressional inquiries.

Recommendation -- A mandatory evaluation system should be established during the planning phase of each program.

<u>Conclusion</u>--U.S. Army veterinary personnel were poorly prepared to participate in civic action in Third World countries.

Recommendation -- To be effective they should receive area
training to include:

- a. History, geography, customs, and culture of the host country.
- b. The socio-economic and political situation of the host nation.
 - c. Civil affairs.

d. Language training.

Each individual should express a sincere interest, desire and capability to work in a counterinsurgency environment.

Conclusion—Medical professionals cannot be truly effective communicating through a translator. When the translator is not trained in the particular discipline (in our case, veterinary medicine), too much of the intent of each party is lost. It is more appropriate to linguistically train the professional than it is to professionally train the linguist.

Recommendation—The U.S. Army veterinary Service should manage its personnel so that, at any given time, an appropriate number of officers as well as enlisted technicians are qualified in the languages projected to be in greatest demand by the Defense Language Institute and other Department of Defense agencies.

<u>Conclusion</u>--It is difficult for our military forces to become involved in truly long-term programs with civilian populations.

Recommendation—At the outset of each project its planners should coordinate and solicit involvement of civilian agencies such as USAID, USDA, and Peace Corps, which can continue U.S. commitment to programs after military civic action workers have turned the project over to local officials.

Conclusion—Most programs end up as direct U.S. aid and indirect host nation assistance. This does not direct the loyalty and gratitude of the people to the proper government. The U.S. program should be designed to advise, assist, and support the host nation government at all levels of animal production. The emphasis should be on direct assistance only when technical or professional competence and physical facilities are insufficient.

Recommendation -- Wherever possible the veterinary effort should be directed towards developing the self-sufficiency of the indigenous people.

Summary

Is veterinary medicine effective as a form of military support in counterinsurgency operations? The answers are "no" and "yes". "No", it has not improved the health of the animal populations, because of our impatience and failure to thoroughly pre-plan and implement long-term projects. "No", it has not succeeded in supporting friendly nations in their attempts to neutralize insurgency and improve the popular perception of their people. Although the "tried and true" IDAD strategy stands as a guideline, U.S. FID programs are not conducted to support it. MEDRETES are an outstanding example.

"Yes", there are isolated projects that were successful in each aspect of internal defense and development. The village of Binh Chuan and perhaps Blacklights IV and X could be considered successful.

In summary, the thesis portrayed military veterinary civic action as an alternative to combat forces in waging counterinsurgency operations. It is one of many such interactions a military force can have with the civilian population to enhance host nation development. When well-planned and executed, veterinary projects can definitely have a positive influence on the outcome of low-intensity conflict. Conversely, money and people in quantity cannot overcome poorly conceived, planned, and conducted exercises that leave the host nation government and military watching from the sidelines.

BIBLIOGRAPHY:

1. Manuscripts

- After Action Reports, 216th Medical Detachment (Veterinary Service), 142d Medical Battalion, Fort Clayton, Panama, from 1 April 1985 to 5 December 1986. In possession of Major Dan Ragland, Route 1, Box 154, Malvern, Arkansas 72104.
- After Action Report, Joint Task Force Bravo, Honduras, Veterinary Services Detachment, from 15 June through 15 December 1985.
- After Action Report, U.S. Army SAFASIA Veterinary Support to U.S. Navy-Vietnam Navy Animal Food Supplement Program from October 1970 to November 1971. 29 November 1971.
- After Action Report, Joint Task Force Bravo, Monduras, Veterinary Element, from 1 May through 23 October 1987.
- After Action Report, 216th Medical Detachment (VS), Exercise Fuerzas Unidas Bolivia '87, 11 May to 23 May 1987.
- After Action Report, 216th Medical Detachment (VS), Exercise Fuerzas Unidas Bolivia '86, 26 April to 4 May 1986.
- After Action Report, 216th Medical Detachment (VS), Exercise Blacklight X, 13-18 July 1986.
- Clark, William H.H. "History of the Veterinary Corps," a manuscript of a book being developed. Personal sensitivities preclude the use of individual names. 1987.
- Collection of documentation pertaining to a Hog Cholera eradication program established by U.S. Army veterinary personnel in Honduras, February 1984 through July 1984. In possession of Major Dan Ragland.
- Denniston, Joseph O. Commentary on Veterinary Civic Action Programs conducted in Vietnam. 4 September 1968.
- End of tour report: LTC Roland R. Stewart, USMACV Staff Veterinarian, from 9 July 1970 through 1 July 1971. Report completed 10 May 1972.
- Kyzar, Carl T. <u>Veterinary Support In The Low Intensity</u>
 <u>Conflict.</u> Fort Sam Houston, Texas: Academy of Health Sciences, August 1987.

- Letter, 3 May 1967, J. Emmett Smith, Cpt, VC, 5th Special Forces, Vietnam, to Cpt McCahan, VC, Special Forces, Fort Bragg.
- Letter, 28 February 1984, Dr. James Cavanaugh, USDA Veterinarian, Honduras, to U.S. Ambassador, Honduras.
- Oral Presentation: Animal Vaccine Production in South Vietnam, given at the 75th Annual Meeting of the Association of Military Surgeons of the U.S., 8 October 1968.
- Summary: Joint Task Force Bravo Medical Element, Honduras--Veterinary Services Rabies Vaccination Exercise, La Maloa, Quitasunga, La Masica, and Yoro, 14 March 1986.
- Summary: Joint Task Force Bravo Medical Element, Honduras--Veterinary Services Rabies and Venezuelan/Eastern Equine Encephalomyelitis vaccination exercise, Rancho Grande and El Playon, 17 April 1986.
- Unsigned, undated, notes on employment of Veterinary Corps officers in the 5th Special Forces Group in the Republic of Vietnam. In possession of Major Dan Ragland.

2. Interviews and Oral Histories

- Oral interview, Colonel George Dixon, USARV Staff Veterinarian from April 1969 through April 1970. Interview conducted 26 September 1973 by Colonel Leland B. Carter.
- Oral interview, Colonel McChesney, USARV and MACV Staff Veterinarian from 26 May 1972 to 29 March 1973. Interview conducted 12 June 1973 by Colonel Leland B. Carter.
- Oral interview, Colonel Joseph S. Quigley, Commander, 4th Medical Detachment (VS), Saigon, Vietnam, from 16 April 1966 to 22 April 1967. Interview conducted by Colonel Leland B. Carter on 25 April 1974.
- Fortin, Arturo. Written response to research topic questionnaire. 4 December 1987. In possession of Major Dan Ragland, Route 1, Box 154, Malvern, Arkansas 72104.
- Freshwater, Monty C. Written response to research topic questionnaire. 30 November 1987. In possession of Major Dan Ragland.
- Goolsby, Walter D. Written response to research topic questionnaire. 20 January 1988. In possession of Major Dan Ragland.

- Kyzar, Carl T. Written response to research topic questionnaire. 6 November, 1987. In possession of Major Dan Ragland.
- Lyons Fred E. Written response to research topic questionnaire. 16 January 1988. In possession of Major Dan Ragland.
- Pelant, Robert. Written response to research topic questionnaire. 28 December 1987. In possession of Major Dan Ragland.
- Pinajota, Raoul. Telephone interview between Major Dan Ragland and Mr. Pinajota, USAID South American Bureau. 3 December 1987.
- Schilling, Jr., Dan E. Written response to research topic questionnaire. 1 December 1987. In possession of Major Dan Ragland.
- Splatt, Herman Jorge. Written response to research topic questionnaire. 18 January 1988. In possession of Major Dan Ragland.
- 4. Government Publications
- Reagan, Ronald. National Security Strategy of the United States. Washington, D.C: The White House, January 1987.
- U.S. Army. <u>Congressional Fact Paper, Military Civic Action</u>. Washington, D.C.: Deputy Chief of Staff for Operations, 14 November 1962.
- U.S. Army. FM 8-27, Veterinary Service. Washington, D.C.: Headquarters, Department of the Army, 30 September 1983.
- U.S. Army. Coordinating Draft, FM 8-999A, Health Service Support in Low Intensity Conflict. Fort Sam Houston: Academy of Health Sciences, November 1987.
- U.S. Army. FM 100-20, Low-Intensity Conflict. Washington, D.C: Department of the Army, 1986.
- U.S. Army. Army Medical Department Roles and Functions in Low-Intensity Conflict. Langley Air Force Base, Virginia: Army -Air Force Center for Low Intensity Conflict, August, 1987.
- U.S. Army. A Guide To Military Civic Action. Washington, D.C: 300th Civil Affairs Group, 1969.
- U.S. Army, Combat Development Group, Brooke Army Medical Center. <u>Veterinary Service for the Long Range Army</u>. Ft. Sam Houston, Texas: U.S. Army Medical Service. Final report 1962.

- U.S. Army. <u>Lessons Learned, Headquarters, United States Army Vietnam</u>, Washington, D.C: 5th Special Forces Group (Abn), 30 April 1970.
- U.S. Army. Military Civic Action As An Element of Internal Defense and Development (IDAD). Fort Bragg, North Carolina: United States Army Institute For Military Assistance, January 1973.
- U.S. Army. Military Assistance Programs and Civic Action
 Agencies. Fort Bragg, North Carolina: United States Army
 Institute For Military Assistance, August 1972.
- U.S. Army. The Role of the Military In Internal Defense and Internal Development (IDAD). Fort Bragg, North Carolina: United States Institute for Military Assistance, November 1976.
- U.S. Department of Defense. <u>Pub. 2, Unified Action Armed</u>
 <u>Forces (UNAAF)</u>, Washington, D.C: The Joint Chiefs of Staff,
 1986.
- U.S. Department of Defense. <u>Pub. 1, Dictionary of Military and Associated Terms</u>, Washington, D.C: The Joint Chiefs of Staff, 1986.
- U.S. Army. <u>Lessons Learned, Headquarters, U.S. Army Southern</u>
 <u>Command</u>, Fort Clayton, Canal Zone: 3rd Civil Affairs Group
 (Abn), 14 August 1970.
- U.S. Army. <u>Lessons Learned, Headquarters, U.S. Army Southern</u>
 <u>Command</u>, Fort Clayton, Canal Zone: 3rd Civil Affairs Group
 (Abn), 12 December 1969.
- U.S. Army. FM 41-10, Civil Affairs Operations. Washington, D.C: Department of the Army, December, 1985.
- U.S. Army. A Guide To Military Civic Action. Washington, D.C.: 300th Civil Afairs Group, 1985.
- U.S. Army. Appendix A, Community Survey and Development,
 (A USAID Community Survey Format); Washington, D.C.: United
 States Army Institute for Military Assistance, January
 1973.
- U.S. Army. Final Report--Fourth Conference of the American Armies. Fort Amador, Canal Zone: Southern Command Headquartrs, 1963.
- Weinberger, Caspar W. Annual Report to the Congress, Fiscal Year 1988. Washington, D.C: Government Printing Office, January, 1987.

5. Books

- Dunne, Howard W., and Allen D. Leman. <u>Diseases of Swine</u>, Fourth Edition. Ames, Iowa: The Iowa State University Press, 1978.
- Griffith, Samuel B. Mao Tse Tung on Guerrilla Warfare.
 New York, New York: Praeger Publishers, 1961.
- Hofstad, Calnek, Helmboldt, Reid, and Yoder. <u>Diseases of Poultry</u>, Seventh Edition. Ames, Iowa: The Iowa State University Press, 1978.
- Kelly, Francis J. <u>Vietnam Studies: U.S. Army Special Forces,</u>
 1961-1971. Washington, D.C: Government Printing Office,
 1973.
- Leggett, Mead, Kramer, and Beal. <u>Prentice-Hall Handbook for Writers</u>. 9th ed. Englewood Cliffs, New Jersey, 1984.
- Lynch, Charles, Frank W. Weed, and Loy McAfee. The Medical Department of the United States Army In the World War (WWI). Washington, D.C: Government Printing Office, 1923.
- Miller, Everett B.. <u>U.S. Army Veterinary Service in World War</u> <u>II</u>. Washington, D.C: Government Printing Office, 1961.
- Mitchell, G. Clay, and Richard J. Burns. Chemical Control of Vampire Bat. Denver, Colorado: U.S. Bureau of Sport Fisheries and Wildlife, in cooperation with the U.S. Agency for International Development. May, 1973.
- Neel, Spurgeon. <u>Vietnam Studies: Medical Support, 1965-1970</u>. Washington, D.C: Government Printing Office, 1973.
- Siegmund, O.H., and C.A. Fraser. <u>The Merck Veterinary Manual</u>, Fourth Edition. Rahway, New Jersey: Merck and Company, Inc., 1973.

6. Articles

- Brown, Eric B. "Honduras Housecalls," <u>Soldiers</u>, 40 (September 1985): 15-18.
- Decker, David A. "Civil Affairs, A Rebirth or Stillborn?,"
 <u>Military Review</u>, 11 (November 1987): 60-64.
- Fauriol, Georges A. "Soviet Fourth Front In Central America Poses A Threat To U.S." Reserve Officers Association (ROA) National Security Report, Vol 5, No. 11 (November 1987): 11-14.

- Hallock, Donald V. "No Battle is Lost," <u>Army Digest</u>. 22 (January 1967): 7-8.
- Jones, Richard A. "The Nationbuilder Soldier of the Sixties,"
 <u>Military Review</u>, 17 (January 1965): 63-67.
- Livingston, Hoyt R. "Civic Action: Purpose and Pitfalls," Military Review, 47 (December 1967): 21-25.
- Orians and Rounsefell. "Operation Bahroom," 5th Special Forces Magazine, (1968): 4.
- Pelant, Robert. "Volunteers in Veterinary Assistance Conceived After Nicaraguan Project," <u>Journal of the American</u>
 <u>Veterinary Medical Association</u>, 191 (September, 1987): 508-509.
- Plonska, Frank. "Porkers Bring Home the Bacon," Army Digest, 26 (January 1971): 45.
- Steele, Dennis. "Long Hard Road," <u>Soldiers</u>, (January 1988): 21 -26.
- Taylor, James A. "Military Medicine's Expanding Role in Low-Intensity Conflict," <u>Military Review</u>, (April 1985): 26-34.
- Thornton, William H. "Medics Play Vital Role in Low-Intensity War," Health Services Command Mercury, (March 1988): 2.
- Travis, Michael T. "Civic Action Vet," Army Digest, 25 (April 1970): 45.
- Walterhouse, Harry F. "Good Neighbors In Uniform," <u>Military</u> Review, 18 (February 1965): 10-18.
- Zygiel, John J. Jr. "A View of Civil Affairs in the LIC Arena," Military Review, 66 (August 1986): 58-64.

Unpublished Dissertations, Theses, Papers

- Bautista, Fredelino S. "Toward A Theory of Military Involvement in National Development in Underdeveloped Countries." Masters of Military Art and Science Thesis, US Army Command and General Staff College, 1985.
- Hinrichs, R. W. "U.S. Involvement in Low-Intensity Conflict Since World War II: Three Case Studies." Masters of Military Arts and Science Thesis, US Army Command and General Staff College, 1984.
- Kirk, Samuel K. "The Role of the U.S. Army Veterinary Corps Officer in Stability Operations." Individual Study Project, U.S. Army War College, 1970.

Via, R. E. "The Veterinary Corps After A Decade of Study." Individual Study Project, U.S. Army War College, 1983.

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